



ECLECTIC MAGAZINE

OF

FOREIGN LITERATURE, SCIENCE, AND ART.

SEPTEMBER, 1858.

From the National Review.

HEGEL'S PHILOSOPHY OF HISTORY.*

WE are reminded of the growth of this world of ours by the rise of new sciences, and by the new relations which older sciences are forming with each other. A wide and all-embracing survey of the past, such as only recent research, and the new life which it has infused into the old learning, have enabled our modern scholars to take, is an indispensable preliminary to the discovery of any law (if such there be) affecting the order of human progress. "The science of history,"† says an acute

and thoughtful writer, "has only become possible in our own time." Not that works, and some of very remarkable ability, have not long been before the public in which the succession of events in history has been attempted to be reduced to a principle. But such works have either been written to establish a foregone conclusion, and retrieve the character of some depreciated theory, like Bossuet's *Histoire Universelle* and Frederic Schlegel's *Philosophy of History*—an assumption which necessarily deprived them of all scientific value; or, when they have been really philosophical in their aim, they have endeavored to trace the relations of cause and effect within a limited period, and in reference to a particular issue—perhaps have confined themselves to the examination of a single element in the complex working and result of civilization. Works of this latter kind,

* *Vorlesungen über die Philosophie der Geschichte.* Herausgegeben von Dr. Eduard Gans; besorgt von Dr. KARL HEGEL.—*G. W. F. Hegel's Werke: Vollständige Ausgabe; Neunter Band, Dritte Auflage.* Berlin, 1848.

Lectures on the Philosophy of History. By G. W. F. HEGEL. Translated from the third German edition by J. SIBBEY, M.A. London: Bohn, 1857.

† J. S. Mill's *Ratiocinative and Inductive Logic*, vol. ii. p. 615.

therefore, are rather contributions to the philosophy of history than the exponents of its philosophy, in a strictly scientific sense; developing the proximate and empirical laws which characterize particular groups of events, and which, when they have been examined and compared with each other in the several spheres of their operation, may possibly furnish the data for ascending step by step to ultimate principles, and to generalizations warranted by the universal *kosmos*. Polybius's investigation of the causes of the world-wide dominion of Rome, may be mentioned as an early and an admirable specimen of the philosophical treatment of a certain portion of human history. Mr. Hallam's *Constitutional History of England*, and M. Guizot's masterly development of the principles of our modern civilization from its mediæval rudiments, are other examples of the same description of writing. Montesquieu's *Spirit of Laws*, though its object is limited, more fully realizes the idea of a comprehensive philosophical review of former ages; and Burke's *Speeches and Tracts* abound with aphorisms, combining the experience of the practical statesman with large general views, in which he has condensed the essence of principles universally applicable. But none of these writers ventured to embrace the vast subject of the history of our species as an organic whole. Perhaps we are not yet prepared for such an undertaking. Perhaps all the attempts hitherto made in this direction can only be regarded as tentative and preparatory, and are hardly to be vindicated from the charge of something presumptuous. This much we may at least affirm, that only within the last half-century have the studies been prosecuted, and the views opened, and the victory over old prejudices won, that rendered it possible so to combine the results of wide-spread inquiry, and so to interpret from a common point of view the records of the past, as even to approximate to a theory of human progress and destination. It is scarcely necessary to allude in passing to the immense advance in every branch of philosophical and historical learning effected by the labors of the great scholars of France and Germany since the commencement of the present century, and to the abandonment, under the weight of resistless evidence, of the false and misleading notion, that the biblical annals and chronology,

even of the earliest periods, must be referred to as an absolute rule for the construction of universal history.

Released from former restraints, and furnished with new instruments of inquiry, learning has wrought out its results in such abundance, and with such rapidity, that the mind is almost oppressed by the multitude of its materials. Mere accumulation of unrelated facts, however new and curious, fatigues the attention and deadens the intellect. History, without a law, is like a vast almanac of the ages, mere juxtaposition without connection. We want a principle to organize this huge chaos into significance, and tell us what it means. We want to see what all the strife and change which has been incessantly agitating mankind is tending to, and where it is destined to issue. We desire, if possible, for the very relief of our minds, to cast on the darkness and confusion of history the interpreting light of philosophy. England, slow to generalize, and tenacious of obvious practical conclusions, has done little towards this work. Mr. Mill, at the close of his work on *Logic*, adopting the better elements of the *Philosophie Positive* of M. Comte, has offered some valuable suggestions on the method in which it should be conducted. The point of main interest turns on the question, whether society revolves in ever-recurring cycles of advance and decline, or is destined to a slow and irregular but still continuous progress. Vico, a century ago, maintained the former of these views. Somewhat later, Herder, whom the Baron Bunsen justly designates "the founder of the Philosophy of History,"* put forth a well-known work, which treated the history of the human race as a grand organic development, and in which, notwithstanding some indistinctness in his general conclusions, we may consider him as the advocate of the latter. Herder's work, though rich in thought and very suggestive, was loose and desultory in its composition, and can only be regarded as a prologue to the proper science of history. It was in the more recent philosophical schools of Germany, combining immense erudition with rare powers of abstract reasoning, that this high theme was first encountered with any degree of scientific exactness. The English, French, and Scotch metaphysi-

* *Christianity and Mankind*, vol. iii., p. 16.

cians of the last century confined themselves mainly to an analysis of the psychological phenomena of the individual consciousness; but to inquiries in this narrower field the Germans have added profound philological attainments, and a thorough acquaintance with history in all its branches, which give remarkable breadth and many-sidedness to their philosophical speculations. Of all British philosophers, the late Sir William Hamilton was in this respect the most of a German. This tendency to unite history with metaphysical analysis is perceptible more or less in all the German schools, from Kant to Hegel. It is conspicuous in Schelling; even the severe abstractions and high generalizations of Fichte's *Bestimmung der Menschen* betray its influence; and so deeply does it impregnate their kindred theories, that sooner or later a comprehensive work on the Philosophy of History might have been confidently predicted as an inevitable result of them. It is only, therefore, what might have been expected, to find Hegel, whose system represents the last term of the speculative philosophy of Germany, applying its principles to the elucidation of history, and venturing to assign the law which governs the progress of the human species. The introduction of this remarkable work for the first time, we believe, to the English public through the medium of Mr. Sibree's translation, affords us the opportunity of exhibiting a brief statement of its views, which may be new to many of our readers, and of offering a few remarks on their soundness and applicability.

Mr. Sibree has executed his task very creditably. To those who are unacquainted with German, we can recommend his version as perspicuous and readable. From constant comparison of it with the original, we can affirm that he has given the sense of his author with great fidelity, though sometimes rather paraphrastically, and with the occasional use of expressions that will strike the English reader as affected. But it is no easy matter, with our ordinary and accepted phraseology, to put the English mind on a level with so novel a range of thought. On the whole, we think the translator has been successful.

Mr. Mill observes, that hitherto the science of history has been conducted almost exclusively on two opposite methods.

One of these, which he calls the geometric, proceeds *a priori*, and is deductive; the other, which he designates the chemical, begins by an analysis of facts and their aggregations, and thus ascending by degrees to the recognition of proximate laws, is inductive. These two methods, Mr. Mill has shown, should be combined, and made to verify each other. Hegel declares that he has followed the inductive method, (*Einleit.* p. 14; Engl. Tr. p. 10;) that his theory is not an *assumption*, but a *result* deduced logically from the collective facts of universal history, which he has passed successively in review before him. It is hardly possible, however, to keep assumption and result altogether distinct. Every man sits down to study under some mental influence or prepossession, which unconsciously directs his attention to those facts, and those relations of facts, that are most in harmony with the idea latent in his mind; and he is thus committed to a theory before he is aware of it. It can not be asserted of Hegel, that he has been wholly proof against the snare which besets a speculative genius with such alluring force. Hegel's theory of history is a particular application of his general philosophical system—that the world is the evolution of an idea, the progressive realization of a potential logic wrapped up in its primitive germ. There is something startling in the adventurous effort of a human mind to grasp the fundamental conditions of absolute being, and to draw out of them the grand architectonic plan of the universe. As clearly and briefly as we can, we will endeavor to convey an idea of Hegel's world-theory, if we may so call it; and to show how it is applied by him, or is itself applicable, to the successive phases of social development.

According to Hegel, the simplest and most elementary possibilities which thought can entertain are *existence* and *non-existence*, and these are absolutely contradictory to each other. A contradiction or *antithesis*, therefore, is involved in the fundamental idea of the universe; which antithesis is harmonized or solved by the origination of individual finite existences, passing from non-existence into existence, (*Werden*;) and so bridging over the chasm between them. Such, he supposes, was the commencement of the great process of the world's development, expressing in that primary act the law of

its future growth. On this point we confess to a very imperfect apprehension of the meaning of our philosopher; and, to speak the truth, can not deny that we look on the mysteries into which he so fearlessly plunges, as far too deep to be fathomed by the line of any human intellect. So far, however, as we can gather his idea from his subsequent exposition and application of it, we infer that it must amount to this—that in the earliest germ of existence the implicit principle of its future development was contained; a potential law of Right and Truth, the condensed essence of a universal logic, which has an inherent tendency to unfold and realize itself, and, bursting with ever-increasing force the bonds within which it was at first confined, seeks continually for more and more liberty, till the idea which it involves has attained to its complete expression. The world's law is a sovereign logic; and the phases of its history may be translated into a series of syllogisms—extremes mediated by a common term, antithesis and solution, distracting tendencies and final reconciliation, then new distractions and a new reconciliation, and so on *ad infinitum*, with some accession to freedom and to the power of right and truth at each successive crisis. In the lower grades of creation, inorganic, organic, animal, this divine idea, this sovereign logic, expresses itself unconsciously; it is fulfilled, but without any sense or response in the subject of it. In man first a dim consciousness of the idea is kindled; but for a long time it is faint and dull, just sufficient to distinguish him from the brute, though as yet almost choked and stifled by the weight of its physical incumbrances. In the successive stages of this social advancement, men attain to a distincter apprehension of this eternal Reason, discern more clearly what Right and Justice, Wisdom and Goodness mean, and make renewed efforts to liberate themselves from the thralldom which hinders them from realizing it, and to give it such an objective existence in their social condition as shall bring their actual and their ideal life into harmony. When men shall have attained to a full recognition of the Divine Idea, as it is involved in the sovereign logic of the universe, and have reduced it completely to practice in all the external relations of their existence—when the world shall be governed by Right and Truth, and men, recognizing them as

such, shall freely accept and obey them as the glory and blessedness of their being—the great antithesis of the world's history, the strife between right and wrong, between justice and oppression, between truth and falsehood, will be harmonized, and the problem of man's destiny on earth be solved. The goal, therefore, of man's aims and endeavors, of which history is the record, is the attainment of this spiritual freedom, the appropriation and fulfillment of the eternal reason, oneness with the absolute Power, which is no other than the law of Truth and Right. The recognition of this great aim and striving of human nature after freedom, more and more developed into clear consciousness through the successive stages of social development, unlocks the secret of history, and furnishes the principle of its philosophy. The idea of this freedom, and the right and truth of which it is the condition, may exist either *subjectively*, that is, simply in the mind itself as a conception, or *objectively*, as realized in an outward constitution of things—in the State. For long periods there is an inconsistency and antagonism between man's sense of what *ought* to be and what *actually* is; and herein lie the great antitheses of history, out of which all progress is evolved. Then, after repeated efforts, comes a partial synthesis, when the subjective and the objective for the time are harmonized; and this forms the culminating point of a nation's history, the age of its highest greatness and prosperity. As the indwelling or subjective idea does not become clear to man till it passes into some objective form, Hegel regards the State, which is its concrete embodiment in law, government, religion, science, and art, as the great means of social development; for it not only affords men a present fruition of their highest aspirations in act and reality, but it reacts on the idea itself, rendering it more distinct and vivid, and stimulating it, if not checked by a counter-influence, to a further growth. Former civilizations invariably exhibit to us one of two results—either a torpid acquiescence in the form of society that had been once stereotyped by some great authoritative force—in the proximate synthesis by which an earlier antithesis had been only too effectually sealed up—in which case the mind ultimately decays and rots in its own stagnation; or else the synthesis, in which a foregoing antagonism had found tempora-

ry reconciliation, is itself broken up by the unabated activity of the idea giving birth to a new antithesis, which has again to work out its issue in a remoter harmony. Such is the law of human progress; and whether we look at the negative or the positive result—at the result of stationary or the efforts of progressive civilization—we draw the same inference from each, that activity, change, development, aspiration, are the end of man's being on earth, and that apart from them his destiny is frustrated.

As the State, in Hegel's view, is the great instrument of social progress, he begins his historical survey with the earliest existence of States. For researches into pre-historic times, when we have only tradition and mythology for our guide, and there are no concrete monuments to appeal to, he does not attempt to conceal his aversion, and even his contempt. It is evident that the researches of Niebuhr and his school found no favor in his eyes. He is one-sided and unjust in this respect. He has all the impatience of a theorist, who can not wait for the slow results and precarious combinations of a tentative and conjectural criticism, but must have facts forthwith to lay the foundations of the splendid superstructure which he has planned. Our present object, however, is not to criticise, but to expound, as best we may, the historical theory of Hegel. Before the origin of the State, he looks upon man as partaking more of a physical than of a moral nature, emerging out of simple naturalism, almost confounding himself and his operations with surrounding objects, with little or no apprehension of any thing beyond the native instincts and affections under whose immediate impulse and guidance he lives. His being is immersed in nature. As yet he is scarcely a disengaged consciousness; and this assimilation with the physical endures in humanity even after the commencement of a State. Nothing is more characteristic of the earliest forms of civilization, when the mental effort which originally reared them has passed, when the first great human synthesis has been achieved, than the rapidity with which they crystallize, as it were, into a permanence and immobility of aspect hardly distinguishable from the deep-rooted hills and the eternal streams and the changeless deserts out of which, like a new organic development, they have recently emerged. The pyramids are a

fitting type of this state of society. China, India, and ancient Egypt, exhibit remarkable phenomena of this description. The two former have transmitted the characteristic features of their primitive life almost unaltered to the present day, and after the lapse of thousands of years are only just beginning to experience the reflected action of our Western civilization. When the light of history first dawns on it, we find China already a completely organized state—all classes equally submitted to the authority of law, the obligations and services attached to every social relation distinctly defined and prescribed, with no room left for the exercise of individual choice and judgment. Uniform and universal education moulds all the citizens into one type of character, and trains them to unquestioning obedience. The officers of government, eligible from every rank, receive their appointments as the result of competitive examination. As for religion, its only recognized form is a reverence for ancestors, and the worship of the emperor as the representative of Deity on earth. But in this primitive solution of the social problem, the state has overdone its work. The objective embodiment has not only expressed, but drained and exhausted, the subjective element, and left no power of free reflection in the mind itself. The life of the Chinese is altogether external. The synthesis is complete at the expense of the possibility of a higher antithesis; and the consequence is, a hard, dry, prosaic form of civilization, working mechanically within itself, and incapable of change except by impulse from without.

In striking contrast to China stands out the old life of India. The Indian mind sees God in all things; but its religion evaporates in a dreamy pantheism, which centers in no clear conceptions of right and truth, and prompts no effort to realize them objectively. Instead of a stereotyped equality under the law, as in China, the nascent development of society has been arrested in India in the form of caste, and future growth rendered impossible by the benumbing despotism of the Brahmins. It is a sacerdotal synthesis in India, under which no political life, no social progress, can take place. Yet there are mental elements of great richness and exquisite beauty in the Indian character, were they not confined by this outward pressure to a purely subjective expression—did they

not waste themselves in a wild and unfruitful idealism.

"There is a beauty," says Hegel, in an eloquent passage, which Mr. Sibree has spiritedly rendered, (p. 146,) "of a peculiar kind in women, in which their countenance presents a transparency of skin, a light and lovely roseate hue, which is unlike the complexion of mere health and vital vigor—a more refined bloom, breathed, as it were, by the soul within, and in which the features, the light of the eye, the position of the mouth, appear soft, yielding, and relaxed. This almost unearthly beauty is perceived in women in those days which immediately succeed childbirth; when freedom from the burden of pregnancy and the pains of travail is added to the joy of soul that welcome the gift of a beloved infant. A similar tone of beauty is seen also in women during the magical somnambule sleep, connecting them with a world of super-terrestrial beauty. A great artist (Schoreel) has moreover given this tone to the dying Mary, whose spirit is already rising to the regions of the blessed, but once more, as it were, lights up her dying countenance for a farewell kiss. Such a beauty we find also in its loveliest form in the Indian world; a beauty of enervation, in which all that is rough, rigid, and contradictory is dissolved, and we have only the soul in a state of emotion—a soul, however, in which the death of free self-reliant spirit is perceptible. For should we approach the charm of this flower-life—a charm rich in imagination and genius, in which its whole environment, and all its relations, are permeated by the rose-breath of the soul, and the world is transformed into a garden of love—should we look at it more closely, and examine it in the light of human dignity and freedom, the more attractive the first sight of it had been, so much the more unworthy shall we ultimately find it in every respect."

In these two earliest types of civilization, the synthesis was affected not by the equilibrium and harmony of the subjective and objective elements of human life, but by the predominance of the subjective in India, and of the objective in China. In China there was a State, but no free mental action; in India much intellectual and imaginative development, but though there were ancient codes of law, as that of Menu, scarcely the rudiments of a State. Hegel has acutely remarked, that history and a State almost imply each other, and are the reciprocal conditions of each other's existence. We observe, accordingly, that China has had a full and exact history from a remote antiquity, but little literature and no speculative philosophy; whereas India, though abounding in poetry and speculation, is almost entirely without a history.

China and India were shut out by mountains and deserts from the rest of the world, and in early ages had not much contact even with each other. We perceive a change in the character of the civilization, when we approach nations that lay more contiguous to each other and to the awakening life of the West. For instance, in the wide regions that were under the influence of the religion of Zoroaster, stretching to the south of the Caspian, from the Oxus and Jaxartes to the Tigris, we discern already an awakening of the human spirit to a half-consciousness of its freedom and its ultimate destiny. Its ideal world, its subjective element, found expression in the kingdom of Ormuzd; and to embody that idea, and give it an objective reality in the subdual of Ahriman, the Dark Spirit, was the object of man's existence on earth. The antagonism of the two principles typified the struggles of human life; while the final triumph of Ormuzd symbolized the recompense, the grand consummating synthesis, with which they were destined to be closed. The precepts of the Zendaavesta inculcated something higher than unquestioning compliance with an ancient law, and blind submission to a despotic priesthood; they enjoined useful labors, and a resolute encounter of evil in all its forms, as the condition of happiness in this and in a future world. They awakened, therefore, an incipient sense of personal independence, and deposited in the nation's heart the principle of progress.

In Egypt, notwithstanding the massiveness and fixity of its ancient civilization, the principle of growth was not entirely inactive. The canon of its hermetic Scripture was never entirely closed. It was not, like China and India, wholly shut up within itself. It made conquests northward and eastward, and must have imbibed new elements of life from the Semitic and Hellenic races, with which it was increasingly brought in contact. But we observe only an incipient movement towards mental emancipation; it was never completed. The Egyptian civilization, after all, resembled more a crystallized product than a living growth. The spirit was still immersed in naturalism, though with a visible effort to liberate itself. In the sphinxes and other strange mixtures of the human and brutal form, Hegel finds an expressive type of the mental state of Egypt—confined and deadened

on one side by a reverence for the old symbolism and animal worship, yet struggling forth into mental freedom and independence on the other.* How to accomplish this mental emancipation was the problem, according to Hegel, which Egypt propounded to posterity, and which it transmitted to another civilization—that of Greece—to solve. In the chasm between Egypt and Greece two other national developments intervened—one of immediate, the other of remoter influence—the Phœnician and the Hebraic, which must not be overlooked. The inestimable service rendered by Phœnicia to the world, was its breaking asunder, and virtually flinging off, the yoke of sacerdotalism. Its rough, bold, seafaring habits of mind effected this great deliverance, though the old rites and the old symbols were still outwardly retained. The priests of Phœnicia were only the most eminent of its citizens, and the functions of religion were retained among the privileges of its great mercantile aristocracy. It was through the tempering medium of Phœnician freedom that the seeds of a sacerdotal civilization were conveyed from Egypt to Greece. Though not renowned for science and literature themselves, the Phœnicians, by their diffusion of the knowledge of alphabetical characters among the coasts and islands of the Mediterranean, did for nascent Greece what the invention of the printing-press has done for modern Europe—it furnished the human mind with its most powerful instrument of progress, and gave it a weapon by which it could ever henceforth effectually repel and subdue the encroachments of a priesthood. With the earliest dawn of Greek history, we find the power of the priesthood gone. In a pastoral land of hills and brooks, shut in between the Jordan valley and the Mediterranean, lived a peculiar and secluded people, allied in speech and blood to the Phœnicians, who in quite another direction made an advance so marked and so decisive towards spiritual freedom, that the world for centuries to come was not in a condi-

tion to accept the truth of which they were the depositaries, and to appropriate its consequences. The Hebrews shook off all adhesions of the primitive naturalism, and rose to the idea of a pure and simple monotheism. But the object of this worship was removed to a great distance from them, dwelling in heaven, where even his chosen people could not attain unto him. The Hebrew idea was, God *above* the world, not *in* the world. The antithesis, therefore, between God and the world, was as yet only partially solved. Yet even in that early age the dim foreshadowing of a better day passed over the prophetic mind, in the anticipation of a kingdom of God, when the Universal Father should come down from heaven and dwell in the midst of his children, and realize the beautiful idea of Truth and Right in a converted and renovated world. It was a prevision of the final synthesis of the world's history.

The moment we touch the coasts of Greece, we perceive that a change has come over the spirit of civilization. The hideous symbolism of Asia and Egypt disappears from the temples, and gives place to human forms of matchless grace and majesty. The old priesthoods are succeeded by high-spirited and independent chieftains, who take the offices of religion into their own hands, and keep its ministers in check. For the monotonous and crushing despotisms of the East are substituted the strife, the impulse, the restlessness of free monarchies or rising republics. Caste and privilege and degradation are replaced by the equality of all freemen under the law. The very heaven of the Greeks breathes the spirit of liberty. Their gods are all independent deities, yielding a free and unconstrained homage to the confessed superiority of Zeus. The Greeks looked on nature with a fresh wonder and delight, without being subdued and oppressed by it. They felt themselves its masters, and rolled its weight off their souls as the ruling gods had overpowered the Titans. Their spirit was no longer steeped in mere physical impressions and influences. Conscious of freedom and strength, they turned their thoughts inward on themselves; yet not, like the Indians, to be absorbed in a dreamy subjectiveness. Their outward life was too bright and too joyous for that. They threw the light of their own minds on every object around them, and burnish-

* Revolting as animal worship is to the feelings of Christians, Hegel argues, and with some reason, that it has not been more degrading in its influence than sun and planet worship; for in the wonderful instincts and mysterious movements of the brute creation, the Egyptians beheld with awe the working of a hidden and incomprehensible principle.—P. 258; Engl. Tr. p. 220.

ed the face of universal nature with their own intellectual brilliancy. They clothed their gods with their own human feelings and attributes; and instead of leaving deity, like the Hebrews, invisible and inaccessible in a distant world of glory, they infused it daily into their own redundant and tumultuous tide of life. Wherever they turned their eye in their own beautiful land, in wood and glen and mountain stream, in the sacred plain or the temple-crowned promontory, or in the fair isles that studded the blue Ægean, a genial presence welcomed them, which to them was living and real, and inspired their poets and artists with the most exquisite conceptions of outward and sensuous beauty. Such was the transformation which the elements of Oriental civilization underwent in the mind of Greece. While the old faith endured, and there was harmony between the indwelling idea and its outward realization in their polity, their religion and their art—their national life was in its bloom, and wore a beauty to which no succeeding age has furnished a parallel. But the principle which animated and held together the elements of this beautiful combination gave way to the dissolving influence of the speculative intellect. The idea proved too strong for the synthesis in which it had temporarily found an objective realization; and a new antithesis ensued, which worked the ruin of the old civilization of Greece. The conquests of Alexander prepared the way for the dominion of the next historical people—the Romans. Alexander is one of those world-historical personages whose career and conduct obtain a complete justification at the hands of Hegel. Alexander understood the purpose of his age, and endeavored to fulfill it. A great idea possessed his mind, and was the inspiration of his life. In reference to this leading object, his character must be judged. From first to last, a marvelous spirit of beauty invests the history of Greece. Two beautiful youths introduce and conclude it; its earliest articulate voice sang the grief and rage of one, and its last great reprisal on Asia was avenged by the death of the other. These are mere accidents, according to the ordinary view; but Hegel has noticed their significance, and they lend a sort of poetic charm to the most wonderful and fascinating narrative in the great epic of human progress.

As the Greek genius was preëminently

objective, delighting in beauty of form and hue and movement, making the divine and the æsthetic all one; so that of the Romans was as decidedly subjective, grave, serious, and practical, identifying the moral with the divine. We speak, of course, of the Romans as they were originally, before they fell under the influence of Greece. At an early period they directed their attention to questions of government and law, and occupied themselves with defining men's social and political relations with each other. Some of the deities peculiar to them partook of the same abstract and ethical character: they were an embodiment of the personal conditions and subjective affections of the human mind—Peace, Health, Fortune, Victory—even such as were odious and negative—Fever, Ill-luck, Childlessness, (*Orbona*).* When their history comes into connection with that of the Greeks, we find their most eminent men devoted to the studies of politics and jurisprudence; and this circumstance was not without effect on the next phase in the world's history, which was represented by Christianity. It helped to awaken the mind to a distincter consciousness of personal independence and personal responsibility. The distinction between *res* and *persona* was first clearly defined by the Roman jurists, as a basis for decisions in their courts of law. It is true, all this tended, in its immediate working under the Empire, to produce a selfish and isolated individualism, with no higher consciousness than that of holding property under certain conditions, and of being bound to the performance of certain duties under an all-embracing despotism. Hegel compares it to a body in a state of decay, resolving itself into innumerable worms. Still, the distincter perception of individual personality, with the rights, duties, and responsibilities attached to it, was an indispensable preparation for

* These deities are a striking exemplification of the deep subjectiveness of the genius of the Romans. Particular feelings and ideas took such a hold of their mind, and became so intensely real, that it could not contain them there, but relieved itself, as it were, by giving them an objective form, and deifying them. These deities were the objects of a free and personal worship, quite distinct from the ancient and national religion, and were honored, for the most part, not with temples, but with simple *ædella*. Their character is well described by C. G. Zumpt, *Die Religion der Römer*, read before the *Verein für Wissenschaftliche Vorträge*; Berlin.

appreciating and profiting by the spiritual freedom proclaimed by the Gospel; it was a lower discipline, through which the mind must pass on its way to the higher.

Hegel's conception of Christianity is peculiar. From his high speculative point of view, he regards the Trinity as essential to it; and in the following way. The ideas of God and Man are reciprocally necessary. God is implied in Man, and Man is implied in God. Still, as God is infinite and absolute, while Man is finite and originates in a certain *negativity*, there is a chasm and dissonance between them, which it is the aim and effort of human history to bridge over and reconcile. This is the fundamental antithesis of the universe; its final synthesis will be the consummation of all things. Man is reconciled to God in Christ, and Christ's Spirit represents their union. In its primitive conception, therefore, Christianity is essentially *triune*—embodies a Trinity. Philosophic thought might have discerned for itself this antithetic relation of God and Man, and have gathered from the actual position of the world's affairs that the possibility of a final reconciliation between them had become a mental necessity for mankind. But for the multitude it was indispensable that this abstract truth should pass into a concrete form, and assume an historical realization. Hence the life, death, and resurrection of Jesus of Nazareth; a combination of events, with its associated beliefs, on which, according to Hegel, as on a pivot, the entire history of humanity turns—the solution of its past, and the condition of its future. Nevertheless Hegel attaches very little importance to the theological questions about the person and birth of Christ, and to the miraculous generally in his history. If we view him solely as a Teacher, we can only place him higher in the same order of character with Socrates. It is the manifestation to the world of the principle of the divine government already indicated, the reconciliation of Man with God, and the admission of Man through that to the absolute freedom of the Spirit, which gives, in Hegel's view, the whole of their religious value to the actions, sufferings, and teachings of Christ. And the world was prepared by a long previous discipline for such a spiritual revolution. *The fullness of time was come.* Pain was a large element in the process of

redemption. Universal subjection prepared the way—through the slow regeneration of centuries (and the work is not yet accomplished) for universal emancipation. The pervading sense of guilt, misery, and hopelessness under the Lower Empire, predisposed men to embrace Christianity. God had come down from heaven, and revealed himself through a human life as a Father, and opened wide his arms of mercy to the erring and sinful, and showed the way direct from earth to heaven. The temporal and the spiritual were separated no longer. Those who accepted Christ, and let his Spirit work the intended change within them, entered thereby into immediate communion with God; and in that communion obtained emancipation from their moral burdens, and complete freedom of spirit. Such, according to Hegel, was the purpose of Christianity; a purpose which it is still carrying out. It aims at building up a kingdom of God among men—a state in which God and man will be completely at one.

This great idea was very rudely and grossly expressed by the mediæval Church. It was perverted by the sacerdotal spirit. The communion with God was limited to the priesthood, and fettered by sacramental conditions. Still, this form of Christianity, coarse and carnal as it was, was perhaps the only form in which it could have taken strong hold of the wild natures to which it had to be addressed. Under all its corruptions, there was some compensation in the belief that the world was not severed from God, because Christ was always in the Church. Religion became a great objective mass of rites and dogmas, which men revered as a manifestation of the truth, not from conviction, but on authority. To the sacerdotal and idolatrous tendencies of the mediæval Church, under which Heathenism recovered a part of its ancient domain, a strong protest and resistance manifested itself in the enthusiastic recurrence among the followers of Mohammed to the pure monotheism of the old Hebrews. The false synthesis that was consolidating itself in Europe, was thus providentially dissolved by the outbreak of a new antithesis in Asia. Mohammedanism, however, was more an idea than a life—producing a sudden, and for the time a resistless, outburst of enthusiasm, but not issuing in a permanent civilization. This

ed the face of universal nature with their own intellectual brilliancy. They clothed their gods with their own human feelings and attributes; and instead of leaving deity, like the Hebrews, invisible and inaccessible in a distant world of glory, they infused it daily into their own redundant and tumultuous tide of life. Wherever they turned their eye in their own beautiful land, in wood and glen and mountain stream, in the sacred plain or the temple-crowned promontory, or in the fair isles that studded the blue Ægean, a genial presence welcomed them, which to them was living and real, and inspired their poets and artists with the most exquisite conceptions of outward and sensuous beauty. Such was the transformation which the elements of Oriental civilization underwent in the mind of Greece. While the old faith endured, and there was harmony between the indwelling idea and its outward realization in their polity, their religion and their art—their national life was in its bloom, and wore a beauty to which no succeeding age has furnished a parallel. But the principle which animated and held together the elements of this beautiful combination gave way to the dissolving influence of the speculative intellect. The idea proved too strong for the synthesis in which it had temporarily found an objective realization; and a new antithesis ensued, which worked the ruin of the old civilization of Greece. The conquests of Alexander prepared the way for the dominion of the next historical people—the Romans. Alexander is one of those world-historical personages whose career and conduct obtain a complete justification at the hands of Hegel. Alexander understood the purpose of his age, and endeavored to fulfill it. A great idea possessed his mind, and was the inspiration of his life. In reference to this leading object, his character must be judged. From first to last, a marvelous spirit of beauty invests the history of Greece. Two beautiful youths introduce and conclude it; its earliest articulate voice sang the grief and rage of one, and its last great reprisal on Asia was avenged by the death of the other. These are mere accidents, according to the ordinary view; but Hegel has noticed their significance, and they lend a sort of poetic charm to the most wonderful and fascinating narrative in the great epic of human progress.

As the Greek genius was preëminently

objective, delighting in beauty of form and hue and movement, making the divine and the æsthetic all one; so that of the Romans was as decidedly subjective, grave, serious, and practical, identifying the moral with the divine. We speak, of course, of the Romans as they were originally, before they fell under the influence of Greece. At an early period they directed their attention to questions of government and law, and occupied themselves with defining men's social and political relations with each other. Some of the deities peculiar to them partook of the same abstract and ethical character: they were an embodiment of the personal conditions and subjective affections of the human mind—Peace, Health, Fortune, Victory—even such as were odious and negative—Fever, Ill-luck, Childlessness, (*Orbona*)*. When their history comes into connection with that of the Greeks, we find their most eminent men devoted to the studies of politics and jurisprudence; and this circumstance was not without effect on the next phase in the world's history, which was represented by Christianity. It helped to awaken the mind to a distincter consciousness of personal independence and personal responsibility. The distinction between *res* and *persona* was first clearly defined by the Roman jurists, as a basis for decisions in their courts of law. It is true, all this tended, in its immediate working under the Empire, to produce a selfish and isolated individualism, with no higher consciousness than that of holding property under certain conditions, and of being bound to the performance of certain duties under an all-embracing despotism. Hegel compares it to a body in a state of decay, resolving itself into innumerable worms. Still, the distincter perception of individual personality, with the rights, duties, and responsibilities attached to it, was an indispensable preparation for

* These deities are a striking exemplification of the deep subjectiveness of the genius of the Romans. Particular feelings and ideas took such a hold of their mind, and became so intensely real, that it could not contain them there, but relieved itself, as it were, by giving them an objective form, and deifying them. These deities were the objects of a free and personal worship, quite distinct from the ancient and national religion, and were honored, for the most part, not with *templa*, but with simple *æcella*. Their character is well described by C. G. Zumpt, *Die Religion der Römer*, read before the *Verein für Wissenschaftliche Vorträge*; Berlin.

appreciating and profiting by the spiritual freedom proclaimed by the Gospel; it was a lower discipline, through which the mind must pass on its way to the higher.

Hegel's conception of Christianity is peculiar. From his high speculative point of view, he regards the Trinity as essential to it; and in the following way. The ideas of God and Man are reciprocally necessary. God is implied in Man, and Man is implied in God. Still, as God is infinite and absolute, while Man is finite and originates in a certain *negativity*, there is a chasm and dissonance between them, which it is the aim and effort of human history to bridge over and reconcile. This is the fundamental antithesis of the universe; its final synthesis will be the consummation of all things. Man is reconciled to God in Christ, and Christ's Spirit represents their union. In its primitive conception, therefore, Christianity is essentially *triune*—embodies a Trinity. Philosophic thought might have discerned for itself this antithetic relation of God and Man, and have gathered from the actual position of the world's affairs that the possibility of a final reconciliation between them had become a mental necessity for mankind. But for the multitude it was indispensable that this abstract truth should pass into a concrete form, and assume an historical realization. Hence the life, death, and resurrection of Jesus of Nazareth; a combination of events, with its associated beliefs, on which, according to Hegel, as on a pivot, the entire history of humanity turns—the solution of its past, and the condition of its future. Nevertheless Hegel attaches very little importance to the theological questions about the person and birth of Christ, and to the miraculous generally in his history. If we view him solely as a Teacher, we can only place him higher in the same order of character with Socrates. It is the manifestation to the world of the principle of the divine government already indicated, the reconciliation of Man with God, and the admission of Man through that to the absolute freedom of the Spirit, which gives, in Hegel's view, the whole of their religious value to the actions, sufferings, and teachings of Christ. And the world was prepared by a long previous discipline for such a spiritual revolution. *The fullness of time was come.* Pain was a large element in the process of

redemption. Universal subjection prepared the way—through the slow regeneration of centuries (and the work is not yet accomplished) for universal emancipation. The pervading sense of guilt, misery, and hopelessness under the Lower Empire, predisposed men to embrace Christianity. God had come down from heaven, and revealed himself through a human life as a Father, and opened wide his arms of mercy to the erring and sinful, and showed the way direct from earth to heaven. The temporal and the spiritual were separated no longer. Those who accepted Christ, and let his Spirit work the intended change within them, entered thereby into immediate communion with God; and in that communion obtained emancipation from their moral burdens, and complete freedom of spirit. Such, according to Hegel, was the purpose of Christianity; a purpose which it is still carrying out. It aims at building up a kingdom of God among men—a state in which God and man will be completely at one.

This great idea was very rudely and grossly expressed by the mediæval Church. It was perverted by the sacerdotal spirit. The communion with God was limited to the priesthood, and fettered by sacramental conditions. Still, this form of Christianity, coarse and carnal as it was, was perhaps the only form in which it could have taken strong hold of the wild natures to which it had to be addressed. Under all its corruptions, there was some compensation in the belief that the world was not severed from God, because Christ was always in the Church. Religion became a great objective mass of rites and dogmas, which men revered as a manifestation of the truth, not from conviction, but on authority. To the sacerdotal and idolatrous tendencies of the mediæval Church, under which Heathenism recovered a part of its ancient domain, a strong protest and resistance manifested itself in the enthusiastic recurrence among the followers of Mohammed to the pure monotheism of the old Hebrews. The false synthesis that was consolidating itself in Europe, was thus providentially dissolved by the outbreak of a new antithesis in Asia. Mohammedanism, however, was more an idea than a life—producing a sudden, and for the time a resistless, outburst of enthusiasm, but not issuing in a permanent civilization. This

attempted purification of religion, which cost Christianity large provinces and the seats of its earliest possession, led ultimately to reprisals on the part of Western Christendom, which reacted, in their final consequences, on Christendom itself, and were among the remoter causes of the Reformation.

Meanwhile a new popular influence in various tribes of Teutonic origin had swept over the provinces of the Western Empire. Attached by a loose and feeble bond to their old hereditary faith, the Germans, with that open susceptibility to first impressions which has in all ages distinguished their race, became the ready converts of a religion which brought with it in the first instance the recommendations of a higher civilization. Their ancient worship was dissolved by the superior attraction of Christianity, which took up into it the disengaged elements, and in the strong fermentation that ensued engendered a new antithesis—that conflict between the secular and spiritual powers which endured, in one form or another, through the whole of the Middle Ages. Its synthesis was first attempted by Charlemagne in the secular sense, when he would fain have erected a new empire of the West, and used the clergy as his artificers in its erection. It was a scheme the success of which depended altogether on the personal character of the sovereign; and it fell to pieces on the death of Charlemagne. A dark and troubled period of entire social decomposition followed, which righted itself at length in a sort of crystallized aggregation round various centers of military authority, held together by the graduated dependencies of the feudal system. Tendencies towards a new social synthesis now became apparent. The overpowering religious awe which seized men's minds at the close of the first millennium, from the birth of Christ, in the all-pervading belief that the world's last hour was at hand, afforded the Church an unparalleled opportunity of asserting its influence and establishing its dominion; which was used with consummate energy and skill by Hildebrand and his successors for more than a century. Of this theocratic ascendancy in Europe the Crusades were the marked historical expression. The carnal piety of the age, incapable of the consolations of a spiritual faith, could not rest till it had dispossessed the infidels

of the Holy City, and held in its own firm material grasp the tomb where the Saviour had lain, and the mount whence he ascended visibly to heaven; and was at hand to welcome him with its own mortal voice at his expected reëappearance on the scene of his earthly ministry. These events were the consummation of the progressive synthesis of the time, carrying with them the occasions of a new and wider antithesis. For the result of the Crusades was deep and bitter disappointment, issuing in incurable skepticism and distrust. Where men had hoped to seize the earnest of heavenly blessedness, they encountered disaster, disease, and death. And these negative, disorganizing influences, separating men's wishes and convictions daily further and further from the actualities around them, were confirmed by other events which now occurred in rapid and startling succession—the overthrow of the Eastern Empire by a Mohammedan power, the mental excitement resulting from the cultivation of Arab and the revival of Greek learning, and the stimulating prospects opened by maritime discovery; all forced into hostile action by the shameless venality and dissoluteness of the Church, affecting separation from the world, as alone possessed of God, and yet in all its tastes, its interests, and its aims, the very type of the grossest worldliness. The great monarchies of Europe, emerging out of feudalism, were unavoidably brought into collision, at various points, with the priesthood, and were anxious to fence in their national churches against the encroachments of the Papal usurpation. All things announced inevitable change; but the immediate cause of open revolt was the outrage offered by Rome and its emissaries to the public sense of moral decency. The circumstances of its origin had a powerful effect on the character of early Protestantism. It was an indignant recoil from stupendous wickedness and hypocrisy; and its sense of human sinfulness was deep and penetrating. Its spirit became earnestly introspective; it took up with renovated conviction the unflinching sternness of the old Augustinism, searched the inward man with severe and jealous eye, and saw no hope for him but in the renovation of divine grace. Hegel has well traced the influence of these reactionary views. The devout Protestant saw an immense antithesis between the

true Church filled with the Spirit of God, and the world filled with the power and working of the devil. Hence he suspected every where the presence and operation of the devil; and the burning of witches, and even of heretics, was only too natural an expression of early Protestant feeling. Various were the attempts of Protestants in different parts of the world to reconcile this antithesis, and realize a kingdom of God in the civil constitutions of men—as among the Anabaptists in Munster, the Calvinists in Geneva, the Presbyterians in Scotland, the Puritans under Cromwell in England, and the Pilgrim Fathers in the wilds of North-America. All these aims, often originating in high and earnest purpose, failed from their impracticable narrowness; and after a few years of intolerable constraint, men escaped from their tyranny, and relapsed into the ordinary course of human citizenship.

In the midst of these religious ferments, thought sprang up in another direction, intellectual and scientific, and developed a new antithesis. It was the period of Descartes, Bacon, Newton, Locke, Leibnitz. To the age of religious enthusiasm succeeded that of enlightenment and free-thinking; what the Germans call *Aufklärung*, and what Mr. Buckle means, in his recent work on civilization by Skepticism. In France, this spirit was represented by the *Encyclopédistes*; in Germany it was patronized by Frederic II. It involved that collision between the ideal and the actual, which leads to the effort to harmonize them, and is the condition of all progress. It was fortunate for England and Northern Germany that, in consequence of their adoption of the Reformation, religion participated in the general movement of ideas, and assumed a form which disarmed hostility, by its greater accordance with the knowledge and intellect of the times; whereas in France, religion, shut up in a sphere of its own, and not allowed to benefit by the influences of the general culture, became, when the hour of reaction arrived, an object of intense hatred and destructive attack. All the revolutions that have taken place in the world are nothing more, from the Hegelian point of view, than so many endeavors, often spasmodic and unavailing, to harmonize the disparities, reconcile the antagonisms, and close up the antitheses between men's ideas and the actual state of the world, so as to get a step

nearer to that absolute freedom of spirit which is the result of perfect coalescence with the Divine Idea. The first French Revolution failed from its reckless destruction of all that had previously existed, and its fanatical attempt to realize at a stroke the abstract ideal of philosophers and theorists. For it is an error to suppose that there is one absolute type of social condition, which should be universally adopted. What was often mistaken for the only possible form of freedom in the last century, was a social tyranny exercised by majorities; as if wisdom could be obtained by a simple show of hands. Freedom does not consist in allowing each individual mind to take its own arbitrary way unchecked, but in the free acceptance and loyal recognition by all minds of the law which they perceive is essential to their living together in organic harmony, and which must vary in its provisions according to a thousand undefinable requirements of historical tradition or geographical position. Hence the form of freedom must be modified by national peculiarities; and nations are then in their happiest state—at the very acme of their prosperity—when the ideas by which they are most strongly possessed, and which constitute their peculiar genius, are expressed and embodied the most completely in their external existence; when their subjective and objective life are in the most entire harmony; when they have a sense of perfect freedom in yielding perfect obedience to the law, and obedience is not constrained but spontaneous. The great desideratum in working out the problem of society is, to furnish constant stimulus and ample space for the ceaseless growth and expansion of mind; and to let it have such gentle, but steady and effective, influence on things without, that they may continually widen and adapt themselves to its needs—antitheses and syntheses quietly succeeding and supplementing each other without any violent change or sudden disruption—society peacefully developing itself towards the ultimatum of absolute freedom, when the Finite shall lose itself in the Infinite, and the Human and Divine be one.

We fear we may have exhausted the patience of our readers in this lengthened, but still very imperfect, exposition of the Hegelian theory of history; but it would have been quite impossible to convey any idea of it, without following it in its ap-

plications to the successive phases of social development, and indicating the practical conclusion drawn from this survey by the author himself. In reviewing the different periods of history, we have not limited ourselves in every instance to the particular applications which Hegel has made of his theory; but we have ventured on none that did not seem to us a legitimate and obvious inference from it, as we understand it. We now crave a small space for a few observations on the principle of this theory.

As a literary production, Hegel's work has great merit. It handles the great mass of learning which it pre-supposes with the ease and lightness of a commanding intellect. His style, notwithstanding some strange peculiarities of diction, is forcible and expressive, and considering the abstract nature of his theme, is for the most part clear and flowing. He marshals the grand historic groupings of events with a sort of pictorial effect before the mental eye, and draws out their connections in unbroken sequence from age to age with the continuity of deductions from a fundamental principle. Yet it must be admitted that his generalizations are sometimes arbitrary and sometimes superficial, and the reader is beguiled with a show of scientific precision which is not warranted by facts themselves. A certain tone of fatalism pervades his interpretation of history, as if men by seizing its seminal idea at the root of all things could predict its future course. In the primitive germ of existence, when it first arose out of nothingness, he assumes a latent wealth of implicit power, which must ever, by the working of an inherent law, press outward into expression and embodiment, as the acorn expands organically into the oak; the incipient activity of an indwelling idea, which it is the destined function of history to evolve and realize to its utmost fullness. The progressive liberation of this idea from the fetters that hinder its expansion—in other words, the emancipation of Spirit from the animalism, the ignorance, the prejudice, as well as the outward oppressions, which clog its earlier career, so that humanity may attain its complete development and fulfill the task for which it has been preordained—is the process, according to Hegel, which is accomplishing itself in that continuous change and movement of society of which

history is the record; and to recognize the law of progress which pervades it is the Philosophy of History. . . .

Moral deserts, argues Hegel, are a distinct question, and rest on a perfectly independent basis. Virtue always carries its compensation with itself, as all vice draws its inevitable and appropriate penalty after it; but the deepest sense of this eternal distinction need not and ought not to distort the grand and salient features in which the physiognomy of universal history is expressed. Hegel has here touched on one of those insoluble problems, which history more than any other human study continually suggests. He has attempted to trace the dim, mysterious limits, where the divine order and the freedom of man come into contact. Neither can be denied: but how are they to be reconciled? Take away the unerring certainty of the divine order, which foresees, provides for, and fulfills all things in their appointed time and place, and the world lapses into chaos. Take away human free agency, and moral imputation in any intelligible sense becomes impossible. We have long, therefore, felt that there is an element of the infinite in this question, which must ever prevent its complete solution by a finite mind. All that can be said about it, is condensed with wonderful force and depth in that sublime antithesis of Scripture, Luke 22:22.

Nevertheless, in spite of great spiritual deficiencies, the theory of Hegel seems to us to possess a decided superiority over the more recent ones of M. Comte and Mr. Buckle, in ascribing the progress of society not so exclusively to the results of positive science and the more expansion of the intellect, but rather to a general development of the whole interior nature of man, including his affections, his sense of the beautiful, and his moral and religious sentiments. The chief means of social advancement insisted on by Hegel, is, in his peculiar phraseology, the objective embodiment of the subjective element in man—the outward realizing of the idea according to its actual degree of expansion; and this includes art, poetry, religion, and the usages of social and domestic intercourse, as well as law, government, science, and philosophy, as the constituents of a national life. It is absurd to speak of the progress of human well-being, and overlook the intimate relation to it of the moral and emotional part of

our nature. A false theology, and narrow views of man's relation to God and the universe, have shrunk from the light of science, and depreciated the importance of its bearing on human happiness; and it was no more than might be expected, that when the unavoidable reaction came, injustice should be done in the opposite direction, and the intellect be exalted at the expense of the heart and soul. The influence of science on civilization is undoubtedly immense; and nothing more visibly measures the progress of civilization than man's growing mastery over the laws of the physical universe, by which he compels them to utter their most hidden secrets, and do his bidding, and minister to his health, his ease, his safety, his activity, and his enjoyment. But in regard to that which is the highest aim of human life, the inward peace, dignity, and contentment of the soul itself, and that interchange of sweet and noble affections which purifies and exalts it—if we except the pleasure resulting from the abstract contemplation of truth, which, however refined, does not enter largely into the happiness of the majority of men—the effect of science is chiefly negative, and consists in removing the pressure of outward evils, in dissipating superstitions and prejudices, and so opening a wider sphere for the free play and development of the moral and spiritual nature. Our homes are made more pleasant and beautiful, and we move with greater ease and fewer sores and irritations through the physical incumbrances and obstructions of life, by the help of science; our minds, too, are strengthened and expanded by the wide and glorious prospects which it opens before us: but were there no hearts to be touched, no sensibilities to be spared a rude laceration, no moral and religious emotions to nurse the well-spring of a nobler life within, what would be the value of this vast apparatus of intellectual machinery? It would be like perfecting an organism, and leaving out the vitality for which only an organism was valuable at all. The recognition of the necessity of increasing measures of spiritual freedom, as the condition of social advancement, so as to afford full scope for the expansion of the inherent energies of the mind, is another feature of the Hegelian philosophy by which it is advantageously distinguished from the theories that aim at making man what he ought to be by the

plastic hand of hierarchies and the moulding force of outward laws, and that have driven M. Comte, with all his science, into the despotic absurdities of his *Catechism of Positive Religion*. The elements of real human progress must be freely evolved out of man, and can not be mechanically fastened on him. Science, for all the higher purposes of humanity, is a dead organism of latent forces till it is taken up by the moral nature and made beautiful by the presence of pure and noble affections, till it is animated by earnest purpose and inspired by some great idea. In some of these points Hegel has a decided advantage over the later theorists on society. Progress is with him a growth from within, not an accretion from without. Man's indwelling idea moulds the crude mass of external nature into conformity with itself. It is not the simple action of physical impressions, continually widened and varied by unceasing observation, that deposits all the wealth and accumulates all the force of which the human soul is susceptible.

Yet, after all, notwithstanding many ingenious and original applications, what does Hegel's celebrated formula of the law of social progress explain that we did not know before, and is not the idea of every man who has observed the course of human affairs and believes in a providential plan? Who does not see that this is the order of human perceptions and endeavors—sense of evil and wrong, observation of incongruity between what is and what should be, impatience, effort, conflict, success, harmony; then new difficulties, new struggles, new solutions; and so on indefinitely? It is a mere summing up of the collective results of human experience. But the generalization which it expresses, to suit all cases, is drawn out to such extreme tenuity, that it loses all available substance, and could not be applied to any practical purpose by the statesman or the philanthropist for calculating the probable consequences of any combination of events. All that is original in the formula is, the attempt to trace it back to a primary idea of creation, which, as we understand it, is atheistic, and involves an essential absurdity. We may wrong our author by misconceiving him; but the only construction we can put on his language is, that he regards Deity itself as a progressive evolution out of nothing, not as the primal all-sufficient

source from which all things originally flowed, but simply as a future possibility now in process of development—the grand final totality of perfected humanity. To us this view seems not only utterly repugnant to every axiom of natural reason, but in its moral aspects blank and desolate beyond expression. Can any effect proceed from a cause that is less than itself? But this theory not only supposes in the first instance a spontaneous evolution out of nothing, but through the entire course of ensuing development a series of effects ever increasing in potency over their causes. Evolution, such as is every where displayed in this boundless universe, is to us wholly inconceivable without the assumption of an infinite fund of power and intelligence behind it. And what religion, available for comfort and support, can a frail dependent being like man extract from the simple thought, however sublime, of the indefinite progressiveness of his species, and the hope that possibly some thousands of years hence the collective wisdom of man may attain a perfection not wholly disproportionate to the idea of God? Strange and repulsive as such theories must appear to every man whose mind has been once imbued with deep religious sentiment, it is undeniably the tendency of mere science, unchecked by other influences, to introduce such bare abstractions into circulation, and to replace personal agency by mere law as the ultimate fact of the universe.

It is a curious question, what would be the effect of the unrestrained predominance of purely scientific tendencies of mind on some of the most beautiful expressions and precious interests of our nature, on language, poetry, art, religion. It is a remarkable fact, noticed by Hegel himself, (p. 63, English Translation,) that language, as a medium of sentiment and feeling, and even of thought, often deteriorates with the growth of civilization. It lies less close to the soul; it is less simple, genuine, and true; it is a less faithful exponent of what is deepest and holiest in humanity. It acquires more the character of a conventional system of symbols, which express the abstractions of thought, and not the concrete realities of the heart and life. What would be the ultimate condition of literature, if one or two languages, as the English or the French, were to become the sole medium of intercourse between civilized men, to

the final abandonment of those dialectic varieties in which the peculiarities of national character have hitherto found a fitting utterance? In spite of some possible commercial and even scientific benefits, there would be more loss than gain in such a change. It would be the victory of dry intellect over the soul. For the language themselves so elevated into sovereignty would lose their original character. To adapt themselves to the wants of a wide-spread and diversely circumstanced population, they would have to efface their old distinctive peculiarities, and rub themselves down to a certain monotonous equality of tone. They would cease to be the languages of Shakspeare and Voltaire. Poetry in its higher sense, as the genuine language of the heart, would be almost an impossibility. What still went by the name of literature, would consist in its higher and graver department of scientific treatises, or bare statements of fact; in its more popular form, would find a vent, as it now does increasingly in the United States, in penny sheets, in periodicals and newspapers. With the dying-out of a dialect capable of rendering the soul's best thoughts into poetry, art and religion, from their close affinity with poetry, would both lose an element of vitality—the former degenerating into a mechanical photography, the latter becoming a speculation, and ceasing to be a lofty sentiment full of ennobling effect on the life.

We do not anticipate any such result, notwithstanding some present appearances that may seem to threaten it; for there is a *vis conservatrix* in human society, which always interposes in time to sustain the balance of our being, and to prevent any one constituent of it from absorbing the rest. As London at the present day is in some degree correcting the evil of its own unwieldy magnitude by breaking down of itself into different municipal wholes, each with its own cluster of associated interests and institutions gathering round a common center, and represented by a local paper; so, when the further advance of the world requires it, that wonderful equalization of thought, speech, and interest, which has for years been converting all Europe and America into one great nation, will doubtless again separate into distinct nationalities, kept even more distinct by their very recognition of a common brotherhood; and give

birth once more, under the inspiring breadth of freedom, and in the consciousness of internal strength and vitality, to those deep, rich, expressive literatures, which can only spring from the exuberant fullness of a nation's heart. With reference to this future result, there is something significant in that passion for the cultivation of old literatures, rather increasing than diminishing with the progress of civilization, which keeps alive an interest in the most beautiful remembrances of the past, and operates as a healthy counteraction to the refrigerating influence of pure science. The counteraction is strongest where the local tendencies most require it. With what enthusiasm do the cultivated minds of North-America abandon themselves to the study of the great writers of England, Italy, and Spain, which are to them what the classics of Greece and Rome once were, and still are, to the scholars of Europe! Jefferson, it is well known, with a sort of prophetic insight, was most anxious to promote classical studies among his countrymen. Nor have the most enlightened and patriotic Frenchmen shown themselves less eager to restore the ancient reputation of their country for classical learning, as some counterpoise to the rigid scientific tendencies of the *Ecole Polytechnique*, so zealously encouraged by the first Napoleon. Oriental and archaeological studies have long been zealously cultivated in France.

Among the secondary causes which, over and above the conviction of its inherent divinity and truth, uphold the authority of Christianity among thoughtful and earnest men, one doubtless is, the perception of its direct subserviency to nourish all those hopes and beliefs in which our moral nature finds its richest nutriment, and which infuse a higher spirit into the pursuits and interests of our daily life. The sublime utterances of the Bible, its solemn appeals to what lies deepest within us, and the awful glimpses which it gives us into the Divine and Infinite, are felt to be in this respect of unspeakable value. They inspire a deep sense of the inherent worth and dignity of the soul. They uphold the value of the individual, as carrying a divine and imperishable life within him, against the some-

what depreciatory influence of economical and statistical inquiries, which often reckon man's worth at so much productive power, whether of good or evil, and take no note of the interior qualities of his nature. There is one view connected with all speculations respecting the final destination of our race, to which Hegel nowhere distinctly alludes, but to which most minds can not but incessantly revert, though the data for forming an opinion lie beyond the sphere which the historian and the scientific theorist, with their particular objects, can properly enter: and yet, apart from this view, we feel that no solution of these high questions can be considered satisfactory and complete. Does man's life finally terminate here? Or is it only the commencement of a higher life? On this question, science, as science, has nothing to say; for its only possible data do not transcend the visible and actual, and its inferences can not exceed the warrant of its data. But there is something older, deeper, and more vital than science, which if science can not create, neither can it touch. Our only postulates are, a living God, and the worth of the individual soul. On these solemn themes the heart is wiser than the head. Here not the intellect, but the soul, must decide; for the soul lies near to God; in faith and prayer it receives communications from him which it can not distrust. Faith is not nourished by science, though the freest science is compatible with it; but by art, poetry, literature—by affectionate converse with other souls, and constant dealing with the spiritual realities of life. The views which result from intellectual speculation, and are opened on us by the ever-widening horizon of science, are in constant process of transmutation; but the affections and the trusts which grow out of them are unchanging and eternal. Literature, which reflects the concentrated result of the universal experience of life and the soul, and is quickened at times by influences from a higher source—Literature, of which the Bible itself is only the highest form—and not Science, is the special nurture for those elements of our being which are permanent and involve indestructible relations with the Unseen and Infinite.

From Blackwood's Magazine.

WONDERS AND CURIOSITIES OF BLOOD.

BLOOD is a mighty river of Life, the mysterious center of chemical and vital actions as wonderful as they are indispensable, soliciting our attention no less by the many problems it presents to speculative ingenuity, than by the many practical conclusions to which those speculations lead. It is a torrent impetuously rushing through every part of the body, carried by an elaborate network of vessels, which, in the course of the twelvemonths, convey to the various tissues not less than three thousand pounds' weight of nutritive material, and convey from the various tissues not less than three thousand pounds' weight of waste. At every moment of our lives there is nearly ten pounds of this fluid rushing in one continuous throbbing stream, from the heart through the great arteries which branch and branch like a tree, the vessels becoming smaller and smaller as they subdivide, till they are invisible to the naked eye, and then they are called capillaries, (hair-like vessels,) although they are no more to be compared in caliber with hairs than hairs are with cables. These vessels form a network finer than the finest lace—so fine, indeed, that if we pierce the surface at almost any part with the point of a needle, we open one of them, and let out its blood. In these vessels the blood yields some of its nutrient materials, and receives in exchange some of the wasted products of tissue; thus modified, the stream continues its rapid course backwards to the heart, through a system of veins, which commence in the myriad capillaries that form the termination of the arteries. The veins, instead of subdividing like the arteries, become gradually less and less numerous, their twigs entering branches, and the branches trunks, till they reach the heart. No sooner has the blood poured into the heart from the veins, than it rushes through the lungs, and from them back again to the heart and arteries, thus completing the circle, or *circulation*.

This wondrous stream, ceaselessly circulating, occupies the very center of the

vital organism, midway between the functions of Nutrition and the functions of Excretion, feeding and stimulating the organs into activity, and removing from them all their useless material. In its torrent upwards of forty different substances are hurried along: it carries gases, it carries salts—it even carries metals and soaps! Millions of organized cells float in its liquid; and of these cells which by some are considered to be organic entities, twenty millions are said to die at every pulse of the heart, to be replaced by other millions. The iron which it washes onwards can be separated. Professor Bérard used to exhibit a lump of it in his lecture-room—nay, one ingenious Frenchman has suggested that coins should be struck from the metal extracted from the blood of great men. Let no one suggest that we should wash our hands with the soap extracted from a similar source!

Although to the naked eye the blood appears as a homogeneous fluid, having a color more or less scarlet, the microscope assures us that it is a fluid which carries certain solid bodies of definite shape and size—so definite, indeed, that a mere stain, no matter where, will, to the experienced eye, betray whether it be the blood of a mammal, a bird, a reptile, or a fish. Prick your finger with a needle, place the drop on the glass slide under your microscope, cover it with a thin glass, and look. You will be surprised, perhaps, to observe that the blood which had so deep a tint of scarlet in the mass, is of a pale reddish yellow, now that it is spread out on the slide; whereupon you conclude that the depth of tint arose from the dense aggregation of those yellow *disks*, which you observe scattered about, some of them adherent together, and presenting the appearance of piles of half-sovereigns. It is these "floating solids" of the blood upon which your attention must now be fixed. They are variously named *Blood-corpuscles*, *Blood-globules*, *Blood-cells*, and *Blood-disks*. It is a pity that one term is not finally adopted; and

blood-discs seems on the whole the best, as being descriptive, without involving any hypothesis. Meanwhile, since physiologists use all these terms, the reader must be prepared to meet with all in this paper.

The first person who saw these blood-discs was undoubtedly Swammerdam, in 1658; but as his observations were not published till many years afterwards, and as in Science priority can only rightfully be awarded to him who first publishes, the title of discoverer is given to Malpighi, who saw and described them in the blood of a hedgehog in 1661. He saw them, but did not understand them. They appeared to him to be only globules of fat. The commencement of accurate knowledge dates from Leewenhoek, who, in 1673, detected them in human blood. "These particles," he says elsewhere, "are so minute, that one hundred of them placed side by side would not equal the diameter of a common grain of sand; consequently, a grain of sand is above a million times the size of one such globule."* We have now the exact measurement of these discs, which was not possible in his day. Extending his observations, Leewenhoek found that in birds and fishes, as well as in quadrupeds, the color of the blood was due to these discs. He seems to have been puzzled by the fact, that in fishes the discs are not round, but oval; and he at first attributed this to the compression exercised by the vessels. It is instructive to hear him confess that he could not persuade himself "that the natural shape of the particles of blood in fishes was an oval; for inasmuch as the spherical seemed to me the more perfect form."† He was too good an observer, however, to permit such metaphysical conceptions long to mask the truth, and, accordingly, he described and figured the blood-disc in the fish as oval.‡

It is to Hewson that science is indebted for the most accurate and exhaustive investigation of the blood which has been made from 1770 down to our own time; and it has been even asserted by one whose word is an authority,§ that Hewson's works contain the germ of all the

discoveries made in our own day. There is something at once painful and instructive in the fact, that, after the publication of researches so precise and important as those of Leewenhoek and Hewson, the whole subject should have been suffered for many years to lapse into ignorant neglect; and instead of any progress being made, we find the most eminent physiologists at the beginning of the present century (Richerand and Majendie, for example) denying positively that the blood-discs existed, or that the microscope could tell us any thing about them.* Nevertheless, there is not an amateur of the present day who is not familiar with them. Science has carefully registered the exact measurements and form of these discs, in upwards of five hundred different species of animals! Contempt of microscopic research seriously retarded the progress of Physiology; it has its parallel in a similar contempt inspired by the great Linnaeus respecting the application of the microscope to Botany; and as the physiologists of this century have had to re-discover what was known to Leewenhoek and Hewson, so also have the botanists had to re-discover what was familiar to Malpighi.

There must assuredly be some relation between the *form and size* of these discs and their *function*; but what that relation is, no one has yet made out. In general, the larger discs are found in the less advanced organisms: that is to say, they are larger in the embryo than in the adult, larger in birds than in mammals, larger in reptiles and fishes than in birds. But they are largest of all in the Triton and Proteus, which as reptiles are exceptions to the rule. Nor can the rule be taken absolutely, even within those limits we have named, since although reptiles are less advanced in organization than mammals, and have larger discs, it is not the least advanced among the mammals that have the largest discs; for instance, the ruminants are less advanced than the quadrupeds, yet among mammals the ruminants have the smallest discs; and in man they are as large as in rodents.†

* Milne Edwards notices a similar denial made by M. Giacomini at the Pisa Congress of scientific men in 1839—a denial which pretended to be based on original investigations.

† In man their diameter varies between $\frac{1}{1000}$ and $\frac{3}{1000}$ of an inch; and their average thickness is $\frac{1}{1000}$ of an inch. Vierordt estimates that in about $\frac{1}{1000}$ of a cubic inch, there are as many as 5,055,000 of these discs.

* Leewenhoek: *Select Works*, i. 89.

† Ibid. ii. 223.

‡ In the larva of the *Ephemeron* are the blood-discs as nearly as possible oat-shaped.

§ Milne Edwards: *Leçons sur la Phys. et l'Anat. Comp.* i. 44. The works of Hewson have been edited, and in a very valuable manner, by Mr. Gulliver, for the "Sydenham Society."

The structure of these bodies is necessarily difficult of study. Leewenhoek, and others, observed that in the discs of the fish and reptile there is always a central spot, which appears dark, or clear, according as it is viewed by transmitted, or reflected, light. This appearance was interpreted as indicating a perforation in the discs, which would consequently imply that they were like quoits. But Hewson settled this doubt by proving the central spot to be a solid nucleus, which he saw escaping from its envelope, to float free in the liquid—an observation subsequently confirmed. It is worthy of remark that this nucleus is seen with difficulty when the blood is newly drawn from a vessel, although it speedily becomes distinct, especially if a little water be added. This has led Valentin, Wagner, Henle, Donders, and Moleschott to the conclusion that the nucleus is *not* present normally, but arises from internal coagulation on exposure to the air: a conclusion rejected by Mayer and Kölliker, the former averring that he has *seen* the nucleus while the blood-discs were still circulating in the capillaries of a young frog's foot. We have not ourselves been able to see this in the large discs of the Triton, and know not if Mayer's observation has been confirmed by any other microscopist. But there are other grounds on which we should be disposed to accept the fact of the nucleus being normally present, and not simply the result of coagulation: the chief of these is, that in the embryo of a mammal we discover nuclei in the discs, whereas in the adult animal no nuclei are discoverable, even after long exposure to the air; and the philosophic zoologist well knows in how many minute particulars the *embryonic* state of the higher animals represents the *permanent* state of the lower. In the discs of all adult mammalia the nucleus is absent; what has sometimes been mistaken for it is simply a central depression of the disc, which gives it the form of a bi-concave lens. Nevertheless, although the nucleus is absent in the adult, it is present in the embryo; and I have seen it in the blood of a young kitten.*

* Mr. Wharton Jones, one of our best investigators, says that the blood of the elephant and the horse contains a few of these nucleated discs. Nasse has seen them in the blood of pregnant women, and Mr. Busk found one in that of a man. Kölliker disputes the accuracy of these observations, and thinks

There are other bodies in the blood beside these, and they are known as the *colorless corpuscles*, which consist of two, if not three, different kinds. The true colorless corpuscle (and it will be convenient to confine the term disc, or cell, to the *red* corpuscle) is much larger than the disc, and seems to be a round vesicle containing a number of spherical granules imbedded in a gelatinous substance. This corpuscle has the property of spontaneous expansion and contraction, which forcibly reminds the observer of the contractions and expansions manifested by that singular microscopic animalcule, the *Amœba*, probably the very simplest of all organic beings. The *Amœba* is a single cell: it has no "organs" whatever, but crawls along the surface by extemporizing an arm or a leg out of its elastic substance, which arm or leg is speedily drawn in again, and fresh prolongations are thrown out; thus, as you watch it, you perceive it assuming an endless succession of forms, justifying the name of Proteus originally bestowed on it. So like the *Amœba* is the colorless blood-corpuscle, that many observers have not hesitated to adopt the opinion that these corpuscles are actually animalcules, and that our blood is a select vivarium; an opinion which is not very tenable, and is far from necessary for the purpose of explanation. We may admit, and the point is of profound philosophic interest, that the blood-corpuscles are *analogous* to the *Amœba*, without admitting them to be parasites. Considering the wondrous uniformity in the organic creation, considering how Life seems every where to manifest itself under forms which through endless varieties preserve an uniformity not less marvelous—so few and simple seem to be the laws of organic combination—there is nothing at all improbable in the idea that as the *Amœba* is the starting-point of the animal *series*, an analogous form may also be the starting-point of the animal *tissues*. The blood is, we know, the source from which the tissues draw their substance; the corpuscles seem to be the embryonic forms of the blood-discs in vertebrata, and constitute the only blood-cells of the invertebrata; we may therefore regard the development of

that in each case the nucleus was produced by some alteration of the contents. At any rate, the presence of nucleated discs is the indication of physiological inferiority, and we may perhaps find them in certain cases of disease.

the tissues as beginning, not indeed in an Amœba, but in a form *analogous* to that of the Amœba. We are further disposed to this point of view by finding that not only is the blood of the invertebrata (that is, of forms which may be regarded as embryonic in reference to the higher animals) principally constituted by these Amœba-like cells,* but that the very substance of the fresh-water polype *sometimes* breaks up into several distinct cells, which can in no respect be distinguished from Amœbæ.† This view seems also borne out in another direction; for, following Auerbach's directions, I have been lately accustomed to obtain Amœbæ when I wanted them, by simply exposing organic tissues, in a state of decomposition, to the prolonged influence of sunlight and water; and as far as careful experiments could warrant a conclusion, the conclusion was that these Amœbæ were the products of a *recomposition* of the decomposing matter, and not the products of ova or spores. This is, however, open to question.

The corpuscles are not numerous in healthy human blood, and play but a secondary part, unless we assume, with many physiologists, that they are the early stage of the red discs. Professor Draper speaks unhesitatingly to this effect. He says there are three periods in the history of our blood-cells. Those of the first period originate simultaneously with, or even previously to, the heart—these are the embryonal cells, they are colorless and nucleated. By a process of internal deliquescence, they are developed into the cells of the second period, which are red, nucleated, and oval, like the normal cells of reptiles. The cells of the third period replace these, "the transition being clearly connected with the production of lymph and chyle corpuscles." This change takes place at the close of the second month of fetal life; and from henceforwards no change is observable; the cells continue to be red, bi-concave, non-nucleated, and circular.

* They have been seen in mollusca, crustacea, and insects. Last autumn I saw them in the beautiful transparent *Corethra* larva.

† Sometimes, but often not; so that the phenomenon probably depends on the state of the animal. Ecker describes a "contractile substance" in the *Hydra*, which he likens to the Amœba, but his figures do not at all resemble the contractile cells which I saw, and which, indeed, were so like Amœbæ, as to make me believe at first that the Polype had swallowed them.

"The cell of the first period is therefore spherical, white, and nucleated; that of the second, red, disc-shaped, and nucleated; that of the third, red, disc-shaped, bi-concave, and non-nucleated. The promoidal cell advances to development in different orders of living beings. The blood of the invertebrated animals contains coarse granule-cells, which pass forward to the condition of fine granule-cells, and reach the utmost perfection they are there to attain in the colorless nucleated cell of the first period of man. In oviparous vertebrated animals, the development is carried a step further, the red nucleated cell arising, and in them it stops at this, the second period. In mammals the third stage is reached in the red non-nucleated disc, which is therefore the most perfect form."*

The resemblance here indicated between the transitory forms of the blood in the higher animals and the permanent forms of the blood in the lower animals, points at a hidden law of organic combination which will perhaps one day be detected, and which will effect for Biology as much as the law of definite proportions has effected for Chemistry. No one can have studied the development of animals, without being profoundly impressed with the conviction that there is something deeper than coincidence in the recurrence of those forms, however transitory, which characterize the permanent condition of some animals simple in organization.

The colorless corpuscles are found by Moleschott to be far more numerous in children than in adults. The difference between the blood of youth, manhood, and old age, is but trifling; yet there is a continual decrease with age. Women, in normal conditions, have fewer corpuscles than men; but during pregnancy, and other periods, the quantity increases, without, however, reaching that in the blood of children. Albuminous food increases the quantity.†

After making ourselves acquainted with these blood-cells and their history, which even the amateur may do with pleasure and profit, we shall have to meet the question—*Is the blood alive?*—a question often debated, and not without its interest to the speculative mind. Harvey‡ held the blood to be the "primigenial and

* Draper: *Human Physiology*, p. 115.

† Wiener *Med. Wochenschrift*, 1854. No. 8.

‡ Harvey: *Anatomical Exercitation concerning the Generation of Living Creatures*, 1653. Exc. 61, p. 276.

principal part, because that in and from it the fountain of motion and pulsation is derived; also because the animal heat or vital spirit is first radicated and implanted, and the soule takes up her mansion in it." We see here the influence of the ancient philosophy. Harvey further declares: "Life consists in the blood, (as we read in Holy Scripture,) because in it the Life and Soule do first dawn and last set. . . . The blood is the genital part, the fountain of Life, *primum vivens, ultimum moriens*."

Harvey's views were taken up with modification, and argued earnestly by Hunter, in his celebrated work *On the Blood*. It is more than twenty years since we read that work, and not having it now at hand, we can give no exposition of its views. The constant objection urged against Hunter by his contemporaries and successors, was the inability to conceive a *living liquid*; but Milne Edwards meets this by saying that it is not the *liquid* which is alive, but the *cells* floating in that liquid, and these he regards as organisms. The reader must feel that the discussion of such a question can not be brought to an issue, unless preceded by an accurate definition of the term employed. What is meant by the blood being alive? If it be meant that an organic structure, having a specific composition, and passing through a definite cycle of changes, such as birth, growth, development, and death, can truly be said to *live*, then blood, which manifests these cardinal phenomena of life, must be pronounced to be alive. This, however, no one would think of denying. But if it be meant that blood has an independent vitality, unlike the vitality of any other tissue, a vitality which can be manifested apart from the organism, the opinion seems to us wholly untenable. Blood is vital, and has vital properties; but so has every tissue of the body, and in no sense can we attribute to it independent life.

Let us now turn from the floating solids of the blood to the plasma in which they float—from the cells to the serum. As the blood circulates in the vessels, we see that there is nothing solid in it but the discs and corpuscles; yet no sooner does it pour from the vessels, than part of the liquid itself becomes converted into a trembling jelly, from which a yellow fluid slowly separates. The jelly-like mass has many of the red discs imbedded in it, and

is called the *clot*; the yellow fluid is the *serum*; the whole process is called the *coagulation*. The general phenomenon was known to the ancients—indeed, it could not have escaped observation; but we must descend as far down as the seventeenth century before meeting with a physiologist who had more than this general knowledge; and there we meet with Malpighi,* who washed the clot free from all the red disc, and found that the white substance which then remained was of a distinctly fibrous texture. Borelli, at the same epoch, declared that this substance was liquid in the blood, and coagulated spontaneously when the blood was drawn from the veins. This opinion is now universal. Ruysch discovered that by whipping the blood as it poured out, the whipping-rods were covered with a mass of white elastic filaments, exactly similar to the substance obtained by washing the red disc from the clot. This substance, the only one among those contained in the blood which has the property of spontaneous coagulation, has, since the days of Fourcroy, been named *fibrine*; and, until recently, it has been held to be identical with the substance of muscular tissue: thus the formation of muscles seemed easily explicable, as the spontaneous coagulation of the fibrine, to those theorists who delight in simplifying organic processes, and who are apt to accept a phrase as an explanation. We now know that the fibrine with blood is *not* the same substance as the fibrine of muscle, and this latter is therefore called *musculine* or *syntonin*.

Why is the fibrine not coagulated in the blood-vessels, seeing how rapidly it coagulates out of them? Professor Draper thinks that "nothing more takes place in blood, which has been drawn into a cup, than would have taken place had it remained in the body. In either case the fibrine would have been equally coagulated. The entrapping of the cells in a mere accident. The hourly demand for fibrine amounts to sixty-two grains; a simple arithmetical calculation will show that the entire mass of the blood would be exhausted of all the fibrine it contains in about four hours, so that the solidification of the fibrine must be taking place at just as rapid rate in the system as after

* Milne Edwards: *Leçons*, i. 115. Malpighi: *Opera Omnia*, 1666, p. 123.

it has been withdrawn. No clot forms in the blood-vessels, because the fibrine is picked out by the muscular tissues for their nourishment as fast as it is presented, nor would any clot form in the cup if we could by any means remove the fibrine granules as fast as they solidified."

This ingenious hypothesis rests entirely on the assumption that the fibrine is momentarily picked out by the muscular tissues; an assumption which seems to us more than questionable, for if the plasma of the muscles be examined—that is, that part of the blood which has passed through the walls of the vessels for the nutrition of the muscles—no coagulated fibrine will be found there; whereas, in almost every case of the escape of serum into one of the cavities, or into the substance of a tissue, the fibrine is found coagulated. Against the hypothesis let the following facts suffice: In the blood of starving men, and in that of men suffering from inflammatory fever, the amount of fibrine is increased; so that instead of fibrine being picked out from the blood to nourish the muscles, it seems to be thrown into the blood from the waste of the tissues. Further—the blood, under certain circumstances, will not coagulate at all; yet the fibrine is not picked out.

"Morgagni," says Dr. Richardson, "had described the blood as quite fluid after death in only four instances; all these were cases in which death ensued from slow arrest of the respiration. Drs. Peters, Goldsmith, and Moses, three American physicians, have published a report on the appearance of the blood in twenty cases of death resulting from the excessive use of ardent spirits. In every case the blood was fluid and dark, was of a cherry-juice appearance, and showed no tendency to coagulate. Majendie produced a fluid state by injecting putrid matters into the veins of animals. In deaths from the narcotic poisons, from delirium tremens, typhoid fever, and yellow fever, the blood is generally described as thin and uncoagulable. Dr. John Davy found the blood fluid and uncoagulable on exposure in cases of drowning, hanging, suffocation from the fumes of burning charcoal, and effusion of blood into the pulmonary air-cells."*

* Richardson: *The Cause of the Coagulation of the Blood*, 1858, p. 34.

Dr. Richardson also states a fact quite inexplicable at present, namely, that not only is the blood drawn by a leech uncoagulable, but that the bite of the leech seems to affect even the blood which remains in the bitten vessels, since the blood continues to flow much longer from the wound than from a wound made by the lancet; and this can only be because the wound is not closed by coagulation. Dr. Richardson sums up his numerous experimental results in the following propositions: The power of coagulation is reduced in proportion to the reduction of the temperature, and is accelerated in proportion to the elevation of temperature. Blood may be frozen, and it will then remain uncoagulated; but on being thawed, and exposed to a higher temperature, the process of coagulation begins. Water produces no effect, unless it be added in excess, when it retards coagulation. Any fluid denser than blood retards coagulation. Free exposure to air quickens coagulation, so also does exposure *in vacuo*. Exclusion from the air retards it. Agitation in the open air quickens, in a closed vessel retards, coagulation.*

We may put our question in another form, and instead of asking why the blood does not coagulate in the vessels? ask, why it coagulates at all? The question has frequently been put, and answered in very contradictory terms. In the form in which it is often put, it seems to us not less idle than to ask why roses have thorns, why the cohesion of iron is greater than that of clay, or why stupid querists are not entertaining companions? Fibrine coagulates, because it is the property of fibrine to coagulate, and would always do so spontaneously, were there not some obstacle present. We may study the conditions which assist, and the conditions which arrest this tendency, but it is hopeless to inquire into the cause of the tendency.

It is certain that the blood would remain fluid were there no fibrine present; but this fibrine has a spontaneous tendency to coagulate, which can only be prevented by the presence of some solvent. What is that solvent? The researches of Dr. Richardson satisfactorily establish some points which go very far towards a demonstration of the true cause, namely, the presence of ammonia in the blood.

* Richardson: *The Cause of the Coagulation of the Blood*, p. 228.

He shows, in the first place, that ammonia *does* preserve the fluidity of the blood, if it be present in quantities amounting to 1 in 8000 parts of blood containing 2.2 per thousand of fibrine. He shows, in the second place, that the blood does normally contain this volatile alkali, which is rapidly given off during coagulation. And he shows, moreover, that the causes which *retard* coagulation are causes which *obstruct* the evolution of ammonia, whereas the causes which *favor* the evolution of ammonia *accelerate* the process of coagulation. Finally, he shows that if the vapor arising from blood be caught in a vessel, and then passed through another mass of blood, the coagulation of this second mass is suspended. The numerous and ingenious experiments by which Dr. Richardson has established these important propositions must be sought in his work, which gained the Astley Cooper prize.

There still remain some difficulties, however, which are not cleared up by this hypothesis. We do not see how it accounts for the blood remaining fluid, even after exposure to the air, in cases of death by drowning and hanging. It would be necessary that Dr. Richardson should show either that hanging caused a complete removal of the fibrine, or that it prevented the evolution of ammonia on exposure to the air. Until one of these points is proved, the difficulty will remain. In some researches into the history of the blood in the animal series, I found the blood of many species of Mollusca quite incapable of coagulation; but whether this depends on the absence of fibrine, or on the presence of any solvent, not volatile, was undetermined.

Hunter declared that the blood of men and animals killed by lightning did not coagulate. The assertion has been often repeated; yet from the experiments of Scudamore and Milne Edwards, we are forced to reject the idea; the latter has repeatedly killed birds by an electric discharge, and found their blood as coagulable as that of other birds. He adds, however, that "in certain cases the blood is evidently less coagulable in individuals struck by lightning; and this peculiarity is observed in connection with a remarkable cadaveric rigidity, so that I am led to think it may depend on the solidification of a portion of the fibrine in the capillaries, rather than on the transforma-

tion of that substance into one not coagulable. This rigidity is sometimes so great in those struck by lightning, that the corpse remains standing in the position in which it was struck."

Before concluding our description of the blood, we must glance at its chemical composition; for if the microscope reveals it to be far from a homogeneous fluid, chemical analysis further assures us that it contains water, salts, sugars, fats, and albuminates. In spite, however, of numberless analyses made with the greatest care, our present knowledge is only approximative; the excessive difficulty of making an unexceptionable analysis being acknowledged by all who have attempted it. We know tolerably well what the *elementary* composition is—that is to say, how many atoms of carbon, hydrogen, etc., are included in every 1000 parts; but what the *immediate* composition is—that is to say, in what forms these atoms exist—we do not know so well. The elementary composition of ox blood, when all its water is removed, is as follows:

Carbon,	519.50
Hydrogen,	71.70
Nitrogen,	150.70
Oxygen,	213.90
Ashes,	44.20
	<hr/>
	1000.00

The following may be taken as the most approximative table of the substances which form the immediate composition of human blood:

Water,		784.00
Albumen,		70.00
Fibrine,		2.20
Cells	{ Globulin,	123.50
	{ Hæmatin,	7.50
	{ Cholesterine,	0.08
	{ Cerebrine,	0.40
Fats,	{ Seroline,	0.02
	{ Oleic and margaric acid,	0.80
	{ Volatile and odorous fatty acid,	
	{ Fat containing phosphorus,	
	{ Chloride of sodium,	3.60
	{ Chloride of potassium,	0.36
	{ Tribasic phosphate of soda,	0.20
Salts,	{ Carbonate of soda,	0.84
	{ Sulphate of soda,	0.28
	{ Phosphates of lime and magnesia,	0.25
	{ Oxide and phosphate of iron,	0.50
Extract, salivary matter, urea, coloring matter of bile, accidental substances,		5.47
		1000.00

In this table sugar is omitted, yet we know that sugar, in varying quantities, always exists in the blood quitting the liver, where it is formed from albuminous matters, and is also generally found in blood at other parts of the organism; but, because this sugar rapidly undergoes transformation into other substances, its amount can not be estimated.

But, granting that Chemistry had succeeded in making a perfect analysis, we should still have to bear in mind that all the constituents vary in different individuals, and in different states of the same individual. The blood of no two men is precisely similar; the blood of the same man is not precisely similar in disease to what it was in health, or at different epochs of life. The iron which circulates in the veins of the embryo, is more abundant than the iron in the veins of the mother; and this quantity declines after birth, to augment again at puberty. The fats vary, in different individuals, from 1.4 to 3.3 in 1000. The blood-cells vary with the varying health. The albumen fluctuates from 60 to 70 parts in 1000, the proportion being greater during digestion. The fibrine, usually amounting to about three in a 1000, may rise as high as 7½, or fall as low as 1.

Such are the chief points ascertained respecting the blood in general. We must now call attention to the different *kinds* of blood in the different parts of the circulation; for although we speak of "the blood" as if it were always one and the same thing, it is, in truth, a system of various fluids, a confluence of streams, each more or less differing from the other. The first grand division is familiar to all men—namely, that of venous and arterial blood; the former being dark purple—"black blood," as it is called—the latter bright scarlet. To many it will seem that this is but a distinction of color—a distinction so easily effaced, that no sooner does the dark blood come in contact with the atmosphere than it brightens into scarlet. The distinction of color is, however, the sign of an important difference; for if venous blood be injected into the arteries of an animal, it produces paralysis; if into the arteries going to the brain, it produces syncope and death. Yet arterial blood thus injected will revive an animal suffering from loss of blood. Between the two fluids, therefore, a profound difference exists; and yet the ven-

ous blood has only to pass through the lungs in an atmosphere not overcharged with carbonic acid, and at once it becomes transformed into a nutrient sustaining fluid. Wherefore? Analysis of the two detects but trifling variations in their solids, the most notable of which is the larger amount of red discs and the smaller amount of fibrine in venous blood. But in their gases an important difference is detected. In both there are nitrogen, oxygen, carbonic acid, and ammonia, either free, or combined so feebly that they are easily disengaged. The quantity of nitrogen is much the same in both; that of ammonia probably does not vary, but the oxygen and carbonic acid vary considerably. Indeed, there is a notion current in popular works that venous blood contains carbonic acid, and arterial blood oxygen—that being the difference between the two fluids. But every physiologist knows that both fluids contain large amounts of both gases, the difference being only in the relative amounts contained in each. The experiments of Magnus were for a long while held to be conclusive of the opinion that arterial blood contained absolutely *more* carbonic acid than venous blood, although in relation to the amount of oxygen, the amount was less; that, in short, it contained more of both gases, but the larger proportion of oxygen gave it its distinction. Recent investigations have considerably shaken this conclusion, but they leave unaltered one result—namely, that arterial blood contains a large amount of carbonic acid, and a still larger amount of oxygen.

Where does the oxygen come from? The atmosphere. Where does the carbonic acid come from? The tissues. The blood which flows *to* the tissues is scarlet, but in the capillaries it parts with some of its oxygen; and as it flows *from* the tissues it is dark, and will become scarlet again on its passage through the lungs. When we know that arterial blood contains carbonic acid as well as oxygen, the idea suggests itself, that on parting with some of this oxygen it might assume the dark color, owing simply to the carbonic acid retained; but this idea is set aside by the fact that unless an *exchange* take place, no oxygen will be liberated. The carbonic acid is proved to be the product of the vital activity of the tissues, and as such is taken up by the blood in exchange for its oxygen; for if

the nerves which supply a limb be cut, and vital activity be thus arrested, the current of blood will not be darkened; precisely as it will not be brightened in its passage through the lungs, if there be a surplus of carbonic acid in the air. The experiments of Bruch* are very instructive on this point. He found that blood saturated with oxygen became darker in *vacuo*, while blood saturated with carbonic acid did not change color.

What causes the change of color when venous blood is submitted to oxygen? Formerly it was held to be due to the iron in the discs; but the iron may be removed without this removal affecting the phenomenon; so that the opinion now held is, that the change of color is due solely to the difference in the *form* of the discs, which become *brighter* as they become more *concave*, and *darker* as they become more *convex*. Oxygen renders them concave, carbonic acid renders them convex.

Arterial blood is every where the same: it is one stream perpetually flowing off into smaller streams, but always the same fluid in its minutest rills as in its larger currents. Not so venous blood. *That* is a confluence of many currents, each one bringing with it something from the soil in which it arises; the streams issuing out of the muscles being substances unlike those issuing out of the nervous centers; the blood which hurries out of the intestine contains substances unlike those which hurry out of the liver. The waste of all the organs has to be carried away by the vessels of the organs. Wondrously does the complex machine work its many purposes: the roaring loom of Life is never for a moment still, weaving and weaving,

"Geburt und Grab,
Ein ewiges Meer,
Ein wechselnd Weben,
Ein glühend Leben."†

Difficult it is for us to realize to ourselves the fact of this incessant torrent of confluent streams coursing through every part of our bodies, carrying fresh fuel to feed the mighty flame of life, and removing all the ashes which the flame has left. Sudden agitation, setting the heart into more impetuous movement, may make us

aware that it is throbbing ceaselessly; or we may feel it beating when the hand is accidentally resting on it during the calm hours of repose; but even then, when the fact of the heart's beating obtrudes itself on consciousness, we do not mentally pursue the current as it quits the heart to distribute itself even to the remotest part of the body, and thence to return once more—we do not follow its devious paths, and think of all the mysterious actions which attend its course. If for a moment we could with the bodily eye see into the frame of man, as with the microscope we see into the transparent frames of some simpler animals, what a spectacle would be unveiled! Through one complex system of vessels we should see a leaping torrent of blood, carried into the depths, and over the surfaces of all the organs, at the rapid rate of one foot in every second, and carried from the depths and surfaces through another system of vessels, back again to the heart: yet in spite of the countless channels and the crowded complexity of the tissue, no where should we detect any confusion, no where any failure. Such a spectacle as this is unveiled to the mental eye alone, and we can not contemplate it, even in thought, without a thrill.

It is a natural question, and often asked, but difficult to answer, What *quantity* of blood circulates every minute in our bodies? The many estimates which have been made need not here be given: only those of Lehmann, Weber, and Bischoff now command general attention. Lehmann says that his friend Weber aided him in determining the quantity of blood in two decapitated criminals. The quantity which escaped was thus estimated: Water was injected into the vessels of the trunk and head, until the fluid, escaping from the veins, had only a pale red or yellow color. The quantity of blood remaining in the body was then calculated by instituting a comparison between the solid residue of this pale red aqueous fluid and that of the blood which first escaped. The living body of one of the criminals weighed 60,140 grammes,* after decapitation, 54,600 grammes, consequently 5540 grammes of blood had escaped; 28,560 grammes of this blood yielded 5.36 of solid residue; 60.5 grammes of sanguineous water, collected

* Siebold & Kolliker: *Zeitschrift für wissenschaftliche Zoologie*, iv. 273.

† *Faust*. "Birth and the grave, an eternal ocean, a changing motion, a glowing life."

* A Gramme is somewhat more than fifteen grains.

after the injection, yielded 3.724 of solid substances. There were collected 6050 grammes of the sanguineous water that returned from the veins, and these contained 37.24 of solid residue, which corresponds to 1980 grammes of blood. The estimate, therefore, turns out as follows: 5540 grammes escaped after decapitation, and 1980 remained in the body, thus making 7520 grammes; in other words, the weight of the whole blood was to that of the body nearly in the ratio of 1 to 8. It is obvious from the account of the experiment that only an approximation could be arrived at. And Bischoff's more recent investigations on the body of a criminal, carefully weighed before and after decapitation, lead to the conclusion that the blood amounted to $9\frac{1}{4}$ lbs., or *exactly one fourteenth of the whole body*.* This nearly corresponds with his former investigations, which gave the weight as one thirteenth of the whole body. If we say ten pounds for an adult healthy man, we shall probably be as near the mark as possible. The quantity, however, necessarily varies in different persons, and seems from some calculations to be greater in women than in men. In the seal its quantity is enormous, surpassing that of all other animals, man included.

In former days, blood-letting was one of the "heroic arms" of medical practice; and is sometimes almost appalling to read of the exploits of practitioners. Haller mentions the case of a hysterical woman who was bled one thousand and twenty times in the space of nineteen years; and a girl at Pisa is said to have been bled once a day, or once every other day, during several years. A third case he mentions of a young man who lost seventy-five pounds of blood in ten days: so that if we reckon ten pounds as the utmost which the body contains at any given period, it is clear that this young man's loss must have been repaired almost immediately. In truth, the blood is incessantly being abstracted and replaced during the ordinary processes of life. Were it not continually renewed, it would soon vanish altogether, like water disappearing in sand. The hungry tissues momentarily snatch at its materials as it hurries through them, and the active absorbents momentarily pour fresh materials into it.

In contemplating the loss of blood from

wounds or hemorrhage, and in noting how the vital powers ebb as the blood flows out, we are naturally led to ask whether the peril may not be avoided by pouring in fresh blood. The idea of *transfusion* is indeed very ancient. But the ancients, in spite of their facile credulity as to the effect of any physiological experiments, were in no condition to make the experiment. They were too unacquainted with physiology, and with the art of experiment, to know how to set about transfusion. Not until the middle of the seventeenth century had a preparation been made for such a trial. The experiments of Boyle, Graaf, and Fracassati, on the injection of various substances into the veins of animals, were crowned with those of Lower, who, in 1665, injected blood into the veins of a dog. Two years later a bolder attempt was made on man. A French mathematician, Denis, assisted by a surgeon, having repeated with success the experiments of Lower, resolved to extend the new idea. It was difficult to get a human patient on whom the plan could be tried; but one evening a mad man arrived in Paris quite naked, and he was daringly seized by Denis as the fitting subject for the new experiment. Eight ounces of calf's blood were transfused into his veins. That night he slept well. The experiment was repeated on the succeeding day; he slept quietly, and awoke sane!

Great was the sensation produced by this success. Lower and King were emboldened to repeat it in London. They found a healthy man willing to have some blood drawn from him, and replaced by that of a sheep. He felt the warm stream pouring in, and declared it was so pleasant that they might repeat the experiment. The tidings flew over Europe. In Italy and Germany the plan was repeated, and it now seemed as if transfusion would become one more of the "heroic arms" of medicine. These hopes were soon dashed. The patient on whom Denis had operated again went mad, was again treated with transfusion, and died during the operation. The son of the Swedish minister, who had been benefited by one transfusion, perished after a second. A third death was assigned to a similar cause; and in April, 1668, the Parliament of Paris made it criminal to attempt transfusion, except with the consent of the Faculty of Paris. Thus the whole thing fell into discredit,

* See his Memoir in Siebold & Kölliker: *Zeitschrift*, ix. 72.

to be revived again in our own day, and to be placed at last on a scientific basis.

It will immediately occur to the physiologist who reads the accounts of these experiments, that transfusion was effected on the supposition that the blood of all quadrupeds was the same, and that it was indifferent whether a man receive the blood of another man, or of a sheep or calf. This supposition was altogether erroneous. The more rigorous investigations of the moderns have established that only the blood of animals of the same species can be transfused in large quantities without fatal results. The blood of a horse is poison in the veins of a dog; the blood of a sheep is poison in the veins of a cat; but the blood of a horse will revive the fainting ass. From this it follows, that when transfusion is practiced on human beings, human blood must be employed; and so employed, the practice is in some urgent cases not only safe, but forms the sole remedy. Blundell has the glory of having revived and vindicated this practice,* and he has seen his idea amply confirmed. Bérard cites fifteen distinct cases of hemorrhage in which transfusion has saved life.†

Seeing that blood has thus a power of reanimating the failing body, it is natural we should inquire to which element of the blood this is due—to the cells or the plasma? We know that it is only necessary to withdraw blood from a part, or prevent its access by a ligature round the arteries, and the part gradually loses all its vital properties; but even after the rigor of the muscles announces death, we have only to readmit the blood by removing the ligature, and the vitality will be restored. Now it has been ascertained that the plasma of the blood, deprived of its cells and fibrine, has no reanimating power when injected, being in fact not more effective than so much warm water. It has also been ascertained that blood, deprived of its fibrine only, produces the same effect as pure blood, whereby it appears that as neither the plasma nor the fibrine possesses the vivifying power, that power must belong to the cells. This is a great step gained, but the restless spirit of

inquiry can not content itself with such a gain, and it asks, what gives to the blood-cells this specific power? Let us see the answer that can be made to such a question.

We know that the cells carry the oxygen, either in slight combinations or free, as in vesicles. We know this, because we find that the plasma is unable to absorb much more than one per cent of its volume of oxygen, whereas the blood, containing cells, absorbs from ten to thirteen times that amount. The change of color they exhibit as they take up or give out oxygen, and the fact, that if they are placed in a vessel containing air, they absorb oxygen from that air, whereas the plasma does nothing of the kind, are proofs of the cells being the transporters of oxygen. But this is not all. The experiments of M. Brown-Séquard establish the important fact that it is to the oxygen carried by these cells that we must attribute their *nutritive* agency, and to the carbonic acid carried by them that we must attribute their *stimulating* agency.* Blood has two offices: it furnishes the tissues with their pabulum, and it stimulates them into activity. Unless the tissues be endowed with certain vital properties, they can not be stimulated into activity; and when stimulated, this activity brings about a destruction, which must be repaired. If stimulus be applied without equivalent nutrition, the force is soon exhausted. This double office the blood performs, according to M. Brown-Séquard, chiefly through the oxygen, as the agent of nutrition, and of carbonic acid, as the agent of excitation. Without accepting his conclusions in all their absoluteness, we may accept thus much of them, for we see him operating on dead animals, or dead parts of animals, by means of *venous* blood charged with oxygen, and producing therewith precisely the same effects as with *arterial* blood; and we see him showing that arterial blood, charged with carbonic acid, acts precisely as venous blood. The conclusion, therefore, is obvious, that the difference between the two fluids is simply owing to the difference in their amounts of oxygen. He takes the blood from a dog's vein, and the blood from its artery, whips both till the fibrine be extracted, and till both have become equally scarlet

* Blundell. "Experiments on the Transfusion of Blood." *Médecin-Chirur. Trans.* 1818, p. 56.

† Bérard. *Cours de Physiol.* iii. 220. It is from this work, and the *Leçons* of Milne Edwards, that all the details on this subject in the text have been taken.

* Brown-Séquard: *Journal de la Physiologie*, 1858, i. 91.

from the absorption of oxygen. He then injects one of these fluids into the right femoral artery of a dead rabbit, in which the rigidity of death has set in for ten minutes, and the other fluid into the left femoral artery. The result is precisely similar in both limbs, namely, in about five minutes both recover their muscular irritability, which they both retain for twenty minutes. Repeating this experiment with blood drawn from vein and artery, but charged with carbonic acid instead of oxygen, he finds a similar result as to the *exciting* power. Having thus made clear to himself that, as respects nutrition and excitation, there is no other difference between arterial and venous blood than is assignable to their differences in the amount of oxygen and carbonic acid contained in each; that venous blood, charged with oxygen, acts precisely as arterial blood; and that arterial blood, charged with carbonic acid, acts precisely as venous blood, M. Brown-Séquard proceeds with his demonstration, that unless the blood be highly oxygenated it has no power of nourishing the tissues; and unless it be highly carbonized, it has no power of stimulating them. We can not here afford sufficient space to give any account of the experiments by which these conclusions are reached, and must refer the curious reader to the memoir itself.* But as the idea of the stimulating power of the blood residing chiefly in the carbonic acid, will be novel and startling to most physiological readers, it may be useful to mention one of the experiments. A rabbit was suffocated; and, as usual in such cases, the intestine exhibited very powerful disorderly movements. Into a coil of this agitated intestine he injected some *venous* blood highly *oxygenated*. Immediately the movement ceased. He then injected *arterial* blood highly *carbonized*, and the movements were at once resumed. Again he injected oxygenated blood, and again the movements ceased, to appear on the second injection of carbonized blood. "It is possible," he says, "to produce two conditions of the organism essentially different, one of which consists in the presence of a greater amount of oxygen than usual, both in the venous and in the arterial blood, the other of which consists in the presence of an excess of carbonic acid in both fluids. In

the first of these conditions, life ceases in spite of the extreme energy of the vital properties, simply because the stimulating power of the blood is insufficient. In the other of these conditions, the stimulating power, being excessive, causes an activity which is soon spent, because it can not be reproduced."

Even should we accept to the full the ingenious hypothesis just propounded, we must guard against an exaggeration of its application. Oxygen may be the one chief *condition* for that exchange between the blood and the tissues which constitutes Nutrition, and without a due supply of oxygen Nutrition may be brought to a stand-still; but we shall greatly err if we suppose that oxidation is itself the process of Nutrition, or that the cells are the sole agents. The albumen, the fats, and the salts which the tissues draw from the blood, are not drawn from the cells, but from the plasma. It is, therefore, quite possible, indeed M. Séquard's experiments render it eminently probable, that the blood-cells, by their oxygen, furnish the indispensable *condition* of Nutrition, the *pabulum* being furnished by the blood-plasma. It is also probable that the cells, by their carbonic acid, furnish the condition of nervous and muscular excitement; so that arterial blood, containing more than its usual amount of carbonic acid, causes an excess of the stimulating over the repairing processes. This will account for the greater cerebral excitement succeeded by languor consequent on exposure to the vitiated atmosphere of a theater, a ball-room, or a lecture-room.

Such is the wondrous fluid we name Blood, and such its properties, as far as Science hitherto has learned them. Before quitting our survey, it will be desirable to say a few words respecting the relation blood bears to Nutrition, since that relation is not generally understood. Every one knows that all the tissues are nourished by the blood. But in what way is this effected? Blood, in itself, is perfectly incapable of nourishing the tissues—so incapable that, if it be poured on them from the rupture of a vessel, it hinders nutrition, and acts like a foreign substance. Accordingly, we see it rigorously excluded from them, shut up in a system of closed vessels; but as it rushes along these vessels, *certain of its elements ooze through the delicate walls of the vessels*, and furnish a *plasma from which*

* *Journal de la Physiologie*, i. 95.

the tissues are elaborated. In exchange, certain products of waste are taken up by the blood, and carried to the organs of excretion. An image may render the process memorable. The body is like a city intersected by a vast network of canals, such as Venice or Amsterdam; these canals are laden with barges which carry to each house the meat, vegetables, and groceries needed for daily use; and while the food is thus presented at each door, the canal receives all the sewage of the houses. One house will take one kind of meat, and another house another kind, while a third will let the meat pass, and take only vegetables. But as the original stock of food was limited, it is obvious that the demands of each house necessarily affect the supplies of the others. This is what occurs in Nutrition: the muscles demand one set of principles, the nerves a second, the bones a third, and each will draw from the blood those which it needs, allowing the others for which it has no need to pass on.

This leads us to notice a luminous conception, attributed by Mr. Paget to Treviranus, but really due to Casper Friedrich Wolff, whose doctrine of epigenesis reposes on it; namely, that "each single part of the body, in respect of its nutrition, stands to the whole body in the relation of a secreting organ." Mr. Paget has illustrated this idea with his accustomed felicity.* Every part of the body taking from the blood those substances which it needs, acts as an excretory organ, inasmuch as it removes that which, if retained, would be injurious to the nutrition of the rest of the body. Thus the polypes excrete large quantities of calcareous and silicious earths: in the polypes which have no stony skeleton, these earths are absolutely and utterly excreted; but in those who have a skeleton, they are, though retained within the body, yet as truly excreted from the nutritive fluid and the other parts as if they had been thrown out and washed away. In the same manner, our bones excrete the phosphates from our blood. The hair in its constant growth not only serves its purposes as hair, but also as a source of removal from the blood of the various constituents which form hair. "And this excretion office appears in some instances to be the only one by which the hair serves the

purpose of the individuals; as, for example, in the fœtus. Thus in the fœtus of the seals, that take the water as soon as they are born, and, I believe, in those of many other mammals, though removed from all those conditions against which hair protects, yet a perfect coat of hair is formed within the uterus, and before, or very shortly after birth, this is shed, and is replaced by another coat of wholly different color, the growth of which began within the uterus. Surely in these cases it is only as an excretion, or chiefly as such, that this first growth of hair serves to the advantage of the individual." Mr. Paget also applies this principle to the explanation of the rudimental hair which exists all over our bodies, and, to that of many other rudimental organs, which subserve no function whatever. He also, without apparently being aware of Wolff's ideas on this point, applies it to the explanation of the embryonic phases. "For if it be influential when all the organs are fully formed," he says, "and are only growing or maintaining themselves, much more will it be so when the several organs are successively forming. At this time, as each nascent organ takes from the nutritive material its appropriate constituents, it will coöperate with the gradual self-development of the blood, to induce in it that condition which is essential, or most favorable, to the formation of the organs next in order to be developed." This principle further enables us to understand how the existence of certain materials in the blood may determine the formation of structures in which these materials are to be incorporated; and it enables us to understand the "constitutional disturbance," or general state of ill-health, which arises from some local disturbance, such as a cold in the head; for, "if each part in its normal nutrition is an excreting organ to the rest, then cessation or perversion of nutrition in one, must, through definite changes in the blood, affect the nutrition of the rest." How evidently the special condition of the organism determines the growth or decrease of certain organs, may best be seen in the sudden development of the beard and the voice as puberty approaches. Birds in the pairing season acquire their most brilliant plumage, and express the tumult of their emotions in perpetual song. Stags at the same epoch develop their antlers, and make the forest ring with their hoarse barking. Mr.

* Pagot: *Lectures on Surgical Pathology*, i. 24, et seq.

Paget justly says: "When two or more organs are thus manifestly connected in nutrition, and not connected in the exercise of any external office, their connection is because each of them is partly formed of materials left in the blood on the formation of the other."*

Does not this throw a new light upon the blood? and do you not therein catch a glimpse of many processes before entirely obscure? It assures us that the blood is not "flowing flesh"—*la chair coulante*—as Borden called it, to the great delight of his successors; nor is it even liquid food. It is an organic structure, incessantly passing through changes, which changes are the conditions of all development and activity. The Food and Drink which we take become subjected to a complicated series of digestive processes. The liquid product of Digestion is carried into the blood-stream, undergoing various changes in its route. It is now blood; but other changes supervene before this blood is fitted for the nourishment of the tissues; and then certain elements pass from it through the walls of the capillaries to be finally assimilated by the tissues. In the simpler animals, the liquid product of digestion is itself the immediate agent of Nutrition, and does not pass through the intermediate stage of blood. It escapes from the digestive canal into the general substance of the body, which it permeates and nourishes much in the way that the blood-plasma nourishes the substance of the more complex animals. But in the simplest animals there is not even this approach to blood. There is no liquid product of digestion, for there is no digestion at all, the water in which these animals live carrying organic matter in

solution; *this* permeates the substance, and is assimilated: thus does the water play the part of blood, carrying the food, and carrying away the waste.*

Let the speculative eye traverse the marvelous scale of created beings upwards, from the simplest to the most complex, and it will observe that Assimilation first takes place by the direct relation of the organism to the surrounding medium; next arrives the interposition of agencies which prepare the food for the higher effects it has to produce, and instead of relying on organic substances in solution, the organism is seen extracting nutriment from other organisms; finally is seen the operation of still more complicated agencies, which impress on the digested food still higher characters, converting it into blood. This blood is retained in a system of vessels every where closed. Yet, in spite of the absence of orifices or pores, it is distributed impartially to the most distant parts of the organism, and it is distributed according to the momentary requirements of each part, so that when an organ is called upon to put forth increased energy, there is always an increase of food sent to supply that energy. If the stomach has been quiescent for hours while the brain has been active, the regulating power of the circulation has adapted the supply of blood to each organ; and no sooner will the stomach be called upon to exert itself, than an abundant supply of blood will instantly be directed to it. This simple and beautiful fact in the animal economy should warn men against the vicious habit of studying at or shortly after meals, or of tasking the brain when the stomach is also tasked.

* This was shown at length in a former number of *Maga*, June, 1857.

* Paget, p. 32.

From the London Review.

DESCRIPTION OF ACTIVE AND EXTINCT VOLCANOES.*

"THE wonder which exceeds all others," observes Pliny, "is that the earth exists a single day without being burnt up." If this was the greatest marvel of the Roman naturalist, with his limited and imperfect knowledge of volcanic phenomena, surely it may be ours in a period when at least a superficial knowledge of volcanic action upon the face of our globe is so widely extended, and when, by laborious and accurate researches into the agency of terrestrial heat, we have analogically arrived at a fair conception of what lies under our feet, and what may be the thermal condition of the central portion of our globe. Supposing the views generally entertained by natural philosophers respecting the incandescence of the greater part of the interior of our planet to be correct,* then we all walk, not upon "the solid earth," as is commonly said, but upon a mere pellicle of cool matter, the thickness of which, when compared with that of the earth, would represent little more than one inch for a globe whose diameter is about nine yards. In another form of illustration, our cool and firm crust does not much exceed the proportion of the thickness of a sheet of ordinary paper, as compared with one of the large globes employed for geographical tuition. In a sense, then, far truer than Horace ever dreamed of when he sung the strain, we may say to every sojourner upon our globe:

—"Incedis per ignes
Suppositus cineri doloso."

* *Description of Active and Extinct Volcanoes.* By CHARLES DAUBENTY, M.D., F.R.S. 8vo. Second Edition. 1848.

Historical and Topographical Map of the Eruptions of Etna, from the Era of the Sicani to the present Time, (1824.) By JOSEPH GEMELLARO.

Carta Topographica dell'Etna, (with the Atlas.) Per il BARONE SARTORIUS DI WALTERSHAUSEN. Sicilia, 1836 al 1843; and Berlin, 1845.

Rambles of a Naturalist. By A. DE QUATREFAGES. (Translated.) Two Vols. 1857.

† We merely represent current views on this point. Our own would rather tend to coincide with those of Mr. Hopkins, which are the result of profound mathematical investigation, and can not be here stated.

"Where'er you tread, the raging fire
Flames underneath a treacherous ash."

The number of volcanoes active and semi-extinct (called by the Italians, *solfaturnas*) can not be precisely, but may be approximately, stated. We present a tabular view derived from two authors, Girardin and Huot, (the latter cited by M. Quatrefages.) This tabular view will also show the geographical distribution of volcanoes, and their numerical relation to continents and islands.

PARTS OF THE WORLD.	ON CONTINENTS.		ON ISLANDS.		TOTALS.	
	Girardin.	Huot.	Girardin.	Huot.	Girardin.	Huot.
Europe.....	4	4	20	18	24	22
Asia.....	17	55	29	71	46	126
Africa.....	2	13	9	12	11	25
America....	68	114	23	90	114	204
The Ocean..	—	—	108	182	108	182
Totals....	100	186	194	373	308	659

It is very difficult to determine even approximately the number of *active* volcanoes on the globe at the present time, since travelers disagree in attributing activity to particular examples; some regarding those as extinct which others consider to be in force. A list of those now presumed to be active is to be seen in Johnston's *Physical Atlas*, and it includes 270, of which 190 are found on the islands or around the shores of the Pacific Ocean. Sir Charles Lyell estimates the eruptions of all known volcanoes to amount, on an average, to twenty every year. Of those volcanoes which are situated upon the islands of the sea, (nearly 194 according to Girardin, and 373 according to Huot,) that is, according to both estimates, about two units of the whole number—many occur in plains but little elevated above the level of the sea, and at considerable distances from other mountains, so as to appear isolated. When so situated, it may be fairly presumed, that the volcanic mountains have risen from the bottom of the sea by the effects of the subaqueous agency, and that the plains which surround

them have been raised above the level of the sea by the gradual accumulation of the materials ejected from the orifices of the volcanoes. In support of this view, the upper layers of the soils of such plains are almost entirely composed of material derived from the deposition of volcanic matter, and they rest on a thick stratum of such matter. We shall presently explain Von Buch's theory of upheavals in connection with a description of Etna. He was the first to show that large volcanoes did not originate from the simple accumulation of these products, but that they had been elevated together with the consolidated masses. Several volcanoes seem to be the fiery-centers of a large volcanic district, which surrounds them in circles of greater or lesser extent. These are generally the loftiest peaks of whole groups of craters which are crowded together, and of which one or other has at some time shown signs of activity. Among such central volcanoes are Vesuvius, Etna, the Peak of Teyde in Teneriffe, the Pico of the Azores, the volcano of the Isle of Bourbon, famous for its mighty and frequent outbursts; Mount Erebus, about 12,500 feet high, discovered not many years since in the Antarctic Ocean, under south latitude 78° ; and Mouna Loa, with Mouna Kea, in Hawaii, which are about the highest known island mountains, reaching, as they do, the one to an elevation of 13,760 feet, and the other to 13,950 feet, above the level of the sea. The crater on one of these mountains will presently be the subject of our description.

With reference to the small crater cones which surround a central volcano, we are generally acquainted with one eruption of each, namely, that to which they owe their origin, and before and after which the volcanic agency has found an outlet at some other point, more or less distant. Thus the whole group of the Canary Islands rests upon one volcanic hearth, over which each of these islands was reared up from the bottom of the sea.

All that has been observed of Vesuvius confirms the opinion that, together with the Phlegrean fields of Puzzuoli, and with the neighboring islands, it forms a single volcanic district, of which the mountain itself is the center, and that an outburst at any particular spot within this circle tends to prevent another in any other part of the same district. But we can not extend this connection beyond the particular district;

for upon consulting a list of the known explosions of Vesuvius and Etna, (as tabulated by Hoff and Daubeny,) from the date of the earliest recorded eruptions of Etna, namely, B.C. 480, 427, and 396, and continued down to the year 1842, we find, from a comparison of the whole, that these eruptions exhibit little synchronism, and that the nearest coincidence was in 1694 and in 1811, when the outbursts from these mountains occurred within a month of each other. On eight several occasions an interval of less than half a year appeared between them, but no other striking coincidences appear; and therefore we regard each as a central volcano of a connected system, dissociated from other systems.

A considerable number of fiery mountains lie in a line one after another, in a long cleft rent through the crust of the earth; and they are frequently grouped in double rows or chains, which bound a greater or less extent. Such have been called linear or chain volcanoes. To this denomination belong the numerous volcanoes of Iceland, of which at least seven are still considered to be partially active, the highest mountain in Iceland being one — namely, Peräfa-Jökul — five thousand six hundred feet in height. In other parts of the volcanic belt that runs across this island, enormous clefts have been torn open, from which streams of lava have flowed forth to a length and breadth which have scarcely been equaled in any other volcanic country. At the extraordinary eruption of Skáptar Jökul* in 1783, three fire-spouts rose high in the air, and then formed a torrent of burning lava, that flowed steadily for six weeks, and ran a distance of sixty miles to the sea in a broken breadth of nearly twelve miles. The Lipari Isles appear to be the loftiest crater-crests of a volcanic tract of considerable length, among which Stromboli is ever active. The western row of the lesser Antilles forms a connective chain of volcanic islands. On the continent of America a great number of burning mountains rise up upon the ridge of the Cordilleras. They generally form the highest portions of the mountain crests, and twelve may be regarded as chain volcanoes. Of these are the long row of Chilian volcanoes, of which Aconcagua, nearly in the latitude

* Skáptar Jökul, or Yökul, signifies "Snow Mountain."

of Valparaiso, is twenty-four thousand feet in height. These volcanoes stretch almost in a straight line along the coast, from 46° to 29° south latitude.

Farther north, in the chain of the Andes, lie the lofty volcanoes of Bolivia and Upper Peru. The high land of Quito is described by Humboldt as being an enormous volcanic vault, and is bounded by two lines of burning mountains, amongst which are Sangay, Tunguragua, Cotopaxi, eighteen thousand seven hundred and twenty-five feet in high; Antisana, no less than nineteen thousand feet above the sea level; also Pinchucha and Imbaruru. The underground fire breaks forth sometimes from one, and sometimes from another, of these openings, which are supposed to be separate volcanoes; and Humboldt states that, during his long stay at Quito, not a month passed in which there were not heard awful noises, with or without earthquakes, beneath their feet.

In Central America, we find in Guatemala, lying between the northern and southern continents, about forty volcanoes crowded together. All of these follow the various bends of the Cordilleras, in an almost unbroken row. One of the most terrific examples of volcanic activity, both in regard to the quantity of matter thrown up, and the magnitude of the accompanying phenomena, was an outburst of Cosequiva in Nicaragua, a volcanic hill only five hundred feet high, standing in a tongue of ground in the bay of Fonseca, on the Pacific coast. It began on the 20th of January, 1835, and lasted several days. The country round, over a space of forty-three leagues across, was wrapped in impenetrable darkness. The shore of the headland was pushed 800 feet out into the sea by the fall of ashes, and two islands of slag and cinders were thrown up in the bay. The fine dust was carried by the wind as far as Jamaica, and an English vessel was covered with the floating pumice at a distance of eight hundred miles out at sea.

The line of Mexican volcanoes is well known, and includes the lofty cone of Colima, and the ever-burning Popocatepetl, seventeen thousand feet high. Another, of scarcely less height, is Orizaba. On a scale which equals or perhaps surpasses that of the Andes, there is a continuous line of volcanic action which commences on the north with the Aleutian Isles, in Russian-America, and extends

first in a westerly direction for nearly two hundred geographical miles, and then southwards, without interruption, throughout a space of between sixty and seventy degrees of latitude, to the Moluccas, where it sends off a branch to the south coast, while the principal train continues westerly through Sumbawa and Java to Sumatra, and then in a north-westerly direction to the Bay of Bengal. This immense volcanic line may be said to follow throughout its course the external border of the continent of Asia; whilst the branch striking south-east from the Moluccas passes from New-Guinea to New-Zealand, conforming, though not strictly, to the outline of Australia. In Java alone there are said to be thirty-eight considerable volcanoes, some of which are twelve thousand feet high. These rarely emit lava, but they discharge quantities of sulphur and sulphurous vapors, and rivers of mud issue from them. The careful observer, Dr. Junghuhn, has with his *Travels in Java* presented us with an atlas, in which are interesting sketches of principal craters. Of these we may specify the Galung Gung, or Galongoon, which in 1822 was the scene of one of the most destructive eruptions of modern date.

As the reader will feel more interest in descriptions of particular volcanoes, and their most important phenomena, we proceed to describe that famous mountain Etna, omitting to notice Vesuvius, as being better known and more frequently described, as well as inferior in magnitude.

The outline of this volcano forms an irregular circle of considerably more than one hundred miles in extent, a more or less prominent range of heights separating it at almost every point from the surrounding plain. An arched plateau, which marks the actual limits of the volcano, rises above these heights on all sides towards the mountain, by an insensible inclination of two or three degrees. This mountain pedestal supports an elliptical cone, the sides of which form the lateral declivities of Etna, having a tolerably regular inclination of about seven or eight degrees. These lateral slopes abut on the central elevation, (the *Mongibello* of the Sicilians,) the highest part of which is terminated by a small inclined plane, (the *Piano del Lago*,) which is itself surrounded by the terminal cone, in which lies the great crater. Towards the east,

two narrow and almost abrupt craters detach themselves from the *Piano del Lago*, and, forming a part of the central elevation, inclose, as it were with two arms, a great valley known by the name of the *Val del Bove*, presently to be described.

Mount Etna rises in a pyramidal form, and isolated in the midst of a distinctly defined region, to a height of nearly 11,000 feet. Its absolute height varies with that of the cone which terminates it; and as the latter is modified by every eruption, new measurements are frequently required. Admiral Smyth obtained his result by trigonometrical operations, which gave the height as 10,874 feet. Sir John Herschel found the height by barometrical observations to be 10,872½ feet. The mean is 10,873 feet. But the summit exists no longer, and it would appear that the actual height scarcely equals that of another point of the crater, which was found by the same observer to be forty-three feet lower than the former. The present height, then, may be taken as 10,830 feet. The base is from thirty to forty miles in diameter.

The great extent of surface, and the facility with which the eye can embrace every part of the mountain range, impart to Etna an appearance far from menacing and unsightly, while the eye follows its broad and finely-developed outline, which rises in apparently gentle slopes to the culminating point. Pindar styled it "the column of heaven."

A certain topographical division of this mountain has long been recognized. It proceeds upon the supposition of three concentric regions or zones, which are readily distinguishable.

The first zone comprises the level ground; and this is the region celebrated for the fertility of its soil, the clearness of the atmosphere, and the salubrity of the climate. Numerous cultivators have from the earliest times occupied this district. On this narrow space sixty-five townships or villages are grouped together, which (according to Gemellaro) contain a population of about 300,000 persons—a number which seems surprising in such a country.

The second zone is the woody region, (*il bosco, regione silveosa*), and it owes its title to the thick forest with which it was formerly covered, and which still, at different points, partially shades this part of the mountain. This district comprises the

lateral declivities, and a great portion of the central elevation of the mountain.

The third zone, which is named "the desert region," (*regione deserta*), occupies the space from the limit of the second zone to the summit. It is in reality nothing more than a vast wilderness, wherein an incessant contest is waged between the fire smouldering beneath the rocks, and the snow which covers the declivities and the summit during the greater portion of the year. So remarkable a contrast has, as may be supposed, afforded opportunities for poetical antitheses or allusions from the times of the Roman poets to our own day. It led Silius Italicus to sing:

"*Summo cana jugo cohibet, mirabile dictu,
Vicinam flammis glaciem, aeternoque rigore
Arduentes horrent scopuli.*"

More than two hundred conical eminences, varying in height, but generally of a very regular form, and hollowed in their interior into a sort of funnel-like cavity, are scattered from the extreme limits of the cultivated region as far as the *Piano del Lago*. These extraneous cones are like so many blow-holes, through which the subterranean fires have made their way at different epochs. All appear to be exclusively formed of ashes and scorias, and to belong to the present geological epoch. Most of them are scattered over the woody region, raising their summits far above the trees, which are either green or bare, according as their formation is of more or less ancient date. These secondary volcanoes occur in the ascent of the mountain, and but a small number are to be found near the summit.

The ascent by a recent scientific traveler, M. Quatrefages, furnishes us with particulars from which we may imagine an ascent of our own. That *savant* describes how at every step of advance we tread upon a soil covered with rich crops of corn and olive groves.

"We pass through villages in which every thing announces ease and competency. On the road-side, charming cottages, or small comfortable farm-steads, the whitewashed walls of which are half-hidden beneath the luxuriant tendrils of the vine, or the foliage of richly-laden fruit-trees. But the ground is a bed of volcanic cinders; the waving crops, the richly-laden cherry-orchards, the pomegranate trees, the flowering orange, have all sprung up on lava, which has scarcely been pulverized by the slow action of

time. The lovely villages through which we passed, the charming country-houses which we stopped to admire, are built with lava and cemented with *pozzolane*.

"Not unfrequently, indeed, the very verge of an ancient crater has served for the site of some smiling cottage whose beauty had attracted our attention. At every step we take, we are traversing or skirting along some more recent lava bed, whose arid and upheaved *cheire** covers fields which were once as fertile as those which it now intersects in the form of a large black dyke. Every where by the side of present happiness and wealth we see the phantom of past desolation and misery, making us tremble for the future.

"This feeling more especially arises when we see rising behind the houses of Nicolosi the double summit of Monti Rossi. This is the crater which in 1669 buried under a shower of ashes all the neighboring country, and even threatened Catania with complete destruction, although situated more than twelve miles' distance from it. Excavated by the violence of the eruption which produced it, it has preserved the form of two cones in juxtaposition, and both rising to a height of nearly a thousand feet, the dark red color of their scoriæ contrasting in the most striking manner with the surrounding objects. A stream of gigantic scoriæ issues from the base of this mountain, and, bending in a southerly direction, falls into the sea to the south-west of Catania, being more than three miles wide in several parts of its course. Not a blade of grass grows on the rocks, which seem to repulse every form of vegetation, excepting here and there, where a few lichens appear to struggle for their mere existence in thin and irregular patches. The *cheire* here possesses no other soil than that which has been transported to it.

"We continued," says M. Quatrefages, "to ascend beneath the rays of a burning sun. The path, becoming more and more steep, passed along a loose soil almost entirely formed of decomposed lava. From time to time it traversed some uncovered lava stream, or wound round the base of some ancient crater which is now covered by vegetation, and stands forth like a pyramid of verdure. The fruitfulness of the woody region is remarkable; for here the flora of Etna, which is so rich in species, seems at every step to dispute possession of the ground with the volcano, which is incessantly threatening it. This struggle gives rise to the most striking contrasts; for absolute sterility is often in immediate juxtaposition with the richest vegetation, as was forcibly exemplified in this part of our excursion. For here all the slopes situated to the left of our road were concealed beneath a thick covering of green, surrounded

here and there by trees which looked as if they were merely balanced on their denuded roots. A few shepherds (followed by numerous herds) who had watched us pass with an air of indifference, imparted animation to the scene. The shallow ground lying to our right presented an equally striking aspect; but above us lay, like petrified torrents and cascades, the enormous lava-beds of the *Boccarelle del Fuoco*, those twin craters which in 1766 destroyed, according to the statement of Dr. Gemellaro, more than a million of oaks in this part of the forest.

"After two hours' march we reached the border of the wood, and the *Casa del Bosco*, a small hut which is built opposite to the *Grotta del Capre*. It was past mid-day. We had already reached a height of 6283 feet above the point from which we started, and there remained only about 3000 feet more to climb in order to reach the *Casa Gemellaro*. This, however, was the roughest part of the excursion. After a short siesta we resumed the ascent, and entered the *desert region*.

"Here the vegetation decreases so suddenly that it seems almost wholly to disappear. The 477 species of plants which grew in the woody region, are here reduced to about eighty, among which we must include more than twenty species of lichens: but not a tree or a shrub is to be seen in these solitudes. The flora of Etna is here only represented by a few of the lowest forms of plants, which are scattered in tufts in the crevices of rocks, or upon some of the slopes formed by the ancient *lapilli*, [a term applied to fragments of light scoriæ, the average size of which is about that of a walnut.] It is impossible to conceive any thing more desolate than this part of the mountain. Our eyes were wearied with gazing on these slopes, which were uniformly covered with old lava, or with gray ashes. The path now became scarcely perceptible. At the foot of Montagnuola, one of the most considerable of the secondary cones of the mountain, the guides showed us the glaciers of Catania, which consist of vast masses of snow regularly arranged below a thin stratum of sand. A little higher up, the snow was completely uncovered."

The travelers pursued their ascending course until they found themselves at the base of the cone, and then began an ascent which they considered

"fully as arduous as that of Stromboli. The stones and sand crumbled away at every moment from under our feet, until, by the direction of our guide, we struck upon a lava-bed lying somewhat further west. At last we reached the crater, where we stood motionless, wrapt in the contemplation of the spectacle presented to us. At our feet yawned the great crater. It was not here a simple inverted cone or funnel, as we had observed in all the secondary cones, and which is the case even on the summit of Vesuvius itself; nor did we see before us that uniform blackness of the rocks and

* *Cheire* or *schiarra* is the name in the Sicilian patois given to the surface of a lava-bed which has cooled on slightly inclined slopes in such a manner as to become charged with more or less considerable blocks of the same substance.

ashes which characterizes Stromboli. The effects of the eruption of the preceding year were still apparent; and the crater of Etna, at the period of our visit, had the appearance of a deep and irregular valley beset with points and capes, and formed by abrupt slopes, bristling with enormous scorise and blocks of lava, heaped up in masses, or rolled and twisted in a thousand different ways by the force of the volcanic action, or the accidental influences to which they had been subjected in the act of falling. The blue, green, and white lava, stained here and there with broad black patches or streaks of dull red, made the livid color of the surrounding rocks still more striking. A death-like silence reigned over the chaos; long lines of white vapor were noiselessly escaping from a thousand different fumaroles, and, trailing slowly along the sides of the crater, carried to the spot where we were standing suffocating emanations of sulphurous and hydrochloric acids. The pale light of the moon, joined to the rising dawn, was a fit accompaniment to this wild scene, whose grand and truly supernatural character no language can adequately express.

"The soil on which we were treading was entirely composed of cinders and scorise, and was humid and warm, and covered with a white coating that looked like hoar frost. This humidity was the acid emitted from the crater, which moistened and corroded every thing that came in contact with it; while the silvery film on which a few crystals were sparkling, was a deposit of sulphur sublimated by the volcanoes, and of the salts formed by the chemical reactions which were incessantly occurring in this formidable laboratory." [According to Elie de Beaumont, the salts are principally sulphates.] "By following the narrow ridge which borders the crater to the south, we reached the highest point, which is situated on its eastern extremity. Here an indescribable spectacle presented itself to our gaze. The sky was perfectly pure, the air was exquisitely transparent, while the horizon (which, from the shortness of the twilight, was now brightly illumined) appeared to have no other limits than those which resulted from the curvature of the earth's surface. From our lofty pedestal we looked down a depth of four or five thousand feet upon the highest summits of the Pelorian and Medonian mountains, while the whole of Sicily lay spread before us as on a map. . . . Wrapt in mute admiration, we cast our eyes from one extremity to the other of this immense circle, when, suddenly, the guide exclaimed, '*Eccolo! ecco il sole!*' and, truly, there was the sun; which, raising its ensanguined orb before us, bathed in one universal tinge of purple earth, sea, and sky, and projected to the very limits of the horizon, and across the entire island, the gigantic shadow of Etna, which, becoming more and more contracted, grew also more distinct in proportion as the sun rose higher above the Ionian sea.

"Light vapors were now every where curling upwards from the earth, as it began to be

warmed by the rising sun. First thin and airy, they gradually thickened, and soon contracted the horizon on every side. After throwing one last look at the valley of the crater, we left our place of observation, and descended towards the foot of a mamelon which lay to the east. Our guide soon stopped us near a narrow and steep declivity which was entirely detached from the rounded margin of the cone, and abutted upon a precipice which descended to a depth of several hundred feet. Here we saw him roll up his sleeve and apply it to his mouth, a proceeding which he signified by signs that we must imitate, rushing forward across the slope as he exclaimed: '*Fate presto!*' Without hesitation we followed him, and speedily reached the margin of the mouth which, in 1842, had thrown its lava into the Val del Bove; and which, being reopened by the eruption of 1843, appeared still to threaten the neighboring district. From the depths of these abysses we had from time to time heard rolling peals or subterranean thunder. Here all description becomes absolutely impossible.

"A vast irregular circular inclosure, formed by perpendicular walls, encircled the chasm. To the left, at the foot of the escarpment, a large blow-hole had opened, from which darted forth eddies of fiery red smoke. In the center, to the right, every where lay enormous blocks of lava, which had been shivered, cracked, and torn, some black, others of a dark red, but all exhibiting in their crevices the vivid tints of the lava from which they had been formed. A thousand streams of white or gray smoke were crossing and recrossing each other in all directions, with a deafening noise, and with a whistling sound, similar to that of a locomotive, from which the steam is escaping. Unfortunately we could do no more than throw a hasty glance at this strange and terrific scene. The hydrochloric acid had entered our throats, and penetrated to the last ramification of the bronchial tubes. With haste, and almost as it were intoxicated, we regained the protecting slope, where we might breathe more at ease; and then, resting on our staffs, sprang to the edge of the declivity, which was solely composed of movable *débris*; and in five minutes we had reached the base of the cone, which it had cost us more than an hour to ascend.

"Our mules were waiting for us at the *Casa*, and no sooner had they received their light load of wrappers and cloaks, baskets and panniers, than they descended by the straight and nearest track, while we diverged to the left, in order to obtain a view of the Val del Bove. This excursion was, perhaps, the most arduous part of our whole journey. The wind was blowing from the north-east, and in a few minutes it had grown into a perfect hurricane. Its icy breath raised clouds of sand and gravel, which pricked and stung our faces and hands as if with so many needles. We found considerable difficulty in reaching the *Torre del Filosofo*, a small and ancient monument which is now in ruins, but which, according to Sicilian legends, was the

habitation of Empedocles. The probability is, however, that this was once a tomb. It nearly touches the escarpment of Serre del Solfizio, which bounds the *Val del Bove** on the side nearest the volcano. Standing upon these perpendicular rocks, we admired this immense circuit, which measures more than six miles in length, and more than three miles in breadth, and whose walls, which are almost every where perpendicular, and formed of masses of lava older than the human race, often rise to a height of more than one thousand feet from the base, which is almost entirely composed of *cheire* superposed upon one another."

No visitor to Etna has been disappointed with the *Val del Bove*, though we have perused accounts savoring of dissatisfaction with the other parts of the mountain. Dr. Buckland was the first English geologist who carefully examined it, and Sir Charles Lyell has well described it. This vast amphitheater is five miles in diameter, surrounded on three sides by precipices of from 2000 to 3000 feet in height. Their faces are broken in the most picturesque manner by the vertical walls of lava which traverse them. These usually stand out in relief, are exceedingly diversified in form, and of great altitude. Their black lines may often, in autumn, be seen relieved by clouds of fleecy vapor which settle behind them, and do not disperse until mid-day, continuing to fill the valley, while the sun is shining on every other part of Sicily, and on the higher regions of Etna. So soon as the vapors begin to rise, the changes of scene are strikingly varied, different rocks being hidden and unvailed by turns; and the summit of Etna often breaking through the clouds for a moment with its dazzling snows, and being then as suddenly withdrawn from view. An unusual silence prevails; for there are no torrents dashing from the rocks, nor any movement of running water in this valley. Every drop that falls from heaven, or flows from melting ice or snow, is instantly absorbed by the porous lava; and such is the dearth of springs that the herdsman is compelled to supply his flocks during the hot season from stores of snow laid up in the hollows of the mountain during winter. Strips of herbage and forest-land serve to lighten the desolation by contrast. After the eruption of 1819, hundreds of trees,

or their white skeletons, stood upon the borders of the black lava, with trunks and branches all leafless, barkless, and blasted.

"As when heaven's fire
Hath scathed the forest oaks, or mountain pines,
With singed tops their stately growth, though
bare,
Stands on the blasted heath."

Looking at the pictorial outlines and sketches of this wonderful spot, and comparing the descriptions of several visitors, we are led to conclude with Sir C. Lyell, that a series of subsidences has formerly occurred on the eastern side of Etna, by which (together, possibly, with the eruptions of the sea) this amphitheater of lava may have been formed in the remote ages. We know from records that vast subsidencies have taken place in other volcanic mountains; for, in 1772, the largest volcano in Java, named Papandayang, was the subject of a subsidence, by which an extent of ground no less than fifteen miles in length, and six in breadth, covered forty villages, and the cone lost 4000 feet of its height engulfed in the earth. Another similar instance is known in the summit of Carguaizazo, one of the loftiest of the Andes of Quito, which fell in on the 19th of July, 1698; and another mountain of greater altitude in the same chain, named Capac Urcu, fell in a short time before the conquest of America by the Spaniards. So late too as the year 1822, a mountain in Java, as we shall elsewhere notice, covered with a dense forest, became an enormous semi-circular gulf.

The disastrous eruption of 1669 has been faithfully described by the Italian, Recupero, who drew much of his information from a manuscript preserved at Nicolosi, (near Etna,) and which was written by a certain Don Vincenzo Macro, chaplain to the Church of Nicolosi. Recupero further consulted the writings of eleven learned Sicilians, a narrative left by the Earl of Winchelsea, English ambassador at Constantinople, and another memoir by the well-known Borelli. All of these were eye-witnesses of the scenes they record, and to theirs Recupero has added his own testimony. The facts therefore appear unusually well attested. From the details afforded by these witnesses, and extracted by M. Quatrefages, the following brief narrative is collected:

* The *Val de Bove*, or "Valley of Oxen," commences near the summit of Etna, and descends into the woody region.

"On March the 8th, 1669, a terrible hurricane arose suddenly at daybreak, and continued to rage for half an hour, shaking all the houses of Nicolosi. The following night was marked by an earthquake, the shocks of which gradually increased in intensity until the Sunday, when the walls of the houses began to fall in. The population sought safety in the open country, and during the night of Monday a terrible shock overthrew all the houses of the town. The earthquake now became more violent from hour to hour, and the trees and the few huts still standing oscillated like so many pieces of wood on the troubled ocean. Human beings were unable to retain their footing on this undulating ground, and stumbled and fell at every repeated movement. About this period the earth opened for a space of twelve miles from the Piano di San-Lio to Monte Frumento—one of the secondary cones which lie nearest to the summit of Etna. The fissure thus made inclined from south-west to north-east, and was from six to four feet wide, but its depth could not be sounded, notwithstanding the frequent attempts made to ascertain it. At length the flames of Etna burst through the soil, which had been so often broken and rebroken. The first mouth was opened to the west of Monte Nucilla, and threw into the air a column of sand and smoke, which was estimated by the inhabitants of Catania to have risen to an elevation of more than 1200 feet. In the space of two hours, six other mouths were opened, all of which were placed in a longitudinal line, and in the same direction as the fissure of which we have spoken. A black and thick smoke issued with horrible noise from these blow-holes, new craters were formed in the course of the day, and on the Tuesday morning the crater appeared from which arose the Monti Rossi.

"This last opening at first ejected a thick smoke, mixed with burning scorice; but after the course of a few hours its mouth gave vent to an immense quantity of lava, which, forming a stream nearly three miles wide and ten feet high, took a southerly direction, and struck against the base of Monpilleri, an ancient crater, which was then covered with trees and other vegetation. The burning stream penetrated through this somewhat shallow soil, and, forming itself a passage across the mountain, it flowed for some time along this self-made aqueduct; but Monpilleri having partially broken down, the lava flowed around it, encircling it like an island of verdure lost in the midst of flames. Seven secondary mouths opened at the same time round the principal crater. They were at first isolated, and threw up into the air an enormous quantity of burning stones, which struck each other as they fell back, and joined the noise of their fall to the terrific artillery of the volcano. At the end of three days they were united into one vast and horrible chasm of fully 2500 feet in circumference, which never ceased from the 11th of March to the 15th of July to pour forth its thundering

roar, to eject cinders and scorice, and to vomit stream of lava."

Up to this time the great crater had remained completely inactive; but on the 15th of March, all at once, towards ten o'clock at night, the entire mountain seemed to shake. First a gigantic column of black smoke and fire darted upwards, and then, with a horrible noise, the summit fell, piece by piece, into the abysses of the volcano. On the following day four daring mountaineers ventured to make the ascent. They found the surface of the soil depressed round the crater, and all the openings which had surrounded it before engulfed and swallowed up, while the orifice, the circumference of which had formerly not exceeded three miles, now measured double that length (if the measurements of Recupero be not exaggerated.)

"The torrent of lava which issued from the Monti Rossi, still continued its course in a southerly direction. Its different branches reached a length of nearly four miles. Each day new streams of liquid fire flowed over the substances that had been partially solidified since the previous nights, thus widening the beds of the different streams which encroached upon the various islands of land temporarily spared. On the 1st of April the lava came within sight of the walls of Catania, and extended to the Campagna of the Albanelli. Here, as if to show its power, its first lifted up and transplanted to a considerable distance an argillaceous hill covered with corn-fields, and then an entire vineyard, which floated for some time upon its burning waves. After having leveled various inequalities, the lava at length reached a deep and broad valley, and the Catansians now believed themselves secure. But in the short space of six hours the valley was completely filled, while the lava, flowing straight towards them, stopped at a stone's throw from the walls, like an enemy who pitches his camp before the fortress he is about to assail.

"On the 12th of April, a stream of lava nearly a mile and a half wide, and more than thirty feet high, advanced in a direct line towards the town. Struck in its course by another current which was flowing westward, it turned aside, and running within a pistol-shot of the ramparts, it passed beyond the harbor, and finally reached the harbor on the 23d of April. Then began a contest between the fire and the water, which even the eye-witnesses felt the impossibility of fully describing. The lava, cooled at its base by contact with the water, presented a perpendicular wall of about 1500 yards in extent, and thirty or forty feet in height. At the point of contact between the two elements, enormous masses of water were converted into vapor, which, rising with a hor-

rible whistling sound, hid the sun behind a mass of thick clouds, and then fell in salt rain over the neighboring country. In the course of a few days the lava had caused the coast line to advance some nine hundred feet further into the sea. New affluents continued to increase the burning stream, whose current, after being incessantly widened, at last reached the ramparts of Catania."

Day by day the stream rose higher and higher, until it was even with the top of the walls, which, no longer able to support this enormous pressure, gave way on the 30th of April for a space of about 120 feet. The lava at once entered by the breach which had been thus made. The part of the town thus broken into was the highest, and Catania now seemed doomed to total destruction. It was, however, saved by the energy of three men, who ventured to contend with the volcano. Doctor Savorio Musureci, and the painter Giacinto Platania, conceived the idea of constructing walls of dry stones, which, being placed in an oblique position before the current, were intended to divert its direction. This was partially successful; but a Dominican brother devised a more promising method of resistance. The beds of lava became encased in a kind of solid canal formed of blocks of cool lava cemented together. The liquid mass, protected by this kind of casing, was able to extend its ravages to a greater distance by preserving its fluidity. The Dominican thought that by knocking down these natural dykes at some favorable point, he might open new channels for the burning waves. Followed by an hundred active men, he made an attack upon the stream, not far from the crater, with sticks, and clubs, and hammers. So intense was the heat that every man was obliged to fall back to recover his breath after he had struck two or three blows. By continued efforts, and by the aid of iron clamps, they contrived to demolish a portion of the dyke, and then the lava diffused itself through this opening. But the new current turned in the direction of the town of Palermo; and its inhabitants, fearing its destruction, fell upon the Dominican and his assistants, and obliged him to retreat.

The proceeding, however, was so far successful that the lava was prevented from overwhelming the whole town; and it stopped on the 8th of May, after having destroyed three hundred houses, sev-

eral palaces and churches, and the garden of the Benedictines. The present garden of the latter has been made up of earth brought from a distance to cover this lava, which rises like an irregular rampart within a few feet of the walls of this monastery, which is, undoubtedly, the handsomest building in Catania. On the 13th of May, a small stream flowed over the rampart to the south of the town near the church Della Parma; but a wall of dry stones which had been hastily constructed, sufficed to arrest its further progress. Some days afterwards a new current invaded the castle, filled up its fosses, and speedily reached the level of the ramparts. A dyke was constructed; but on the 11th of June the lava crossed the wall and flowed through the town. A new barrier was then opposed to it, arrested it, and preserved one of the finest parts of Catania. From this period the lava flowed in a direct course into the sea. Lord Winchelsea tells us that the eruption continued some time longer, and that the cinders fell at Catania, and as far as thirty miles out at sea, with such violence and intensity as to be injurious and painful to the eyes.

This celebrated eruption covered about fifty square miles with a stratum of thick lava, which at certain points extended to a depth of 100 feet, and which, after threatening to annihilate Catania, destroyed the habitations of 27,000 persons. Even in the present day traces exist on the surface of the soil of these terrible phenomena which occurred nearly 200 years before: Recupero has found fifteen accessory mouths, which mark the direction of the subterranean forces over a space of about 1500 yards.

Catania itself may be called the capital of lava. Although it is separated from the great crater, which is the center of action of the subterranean fires, by a distance of twenty-five miles, as the crow flies, yet this town appears as if it were the direct product of the volcano. Inclosed within four lava beds of different ages, the materials for its houses, and pavements, and streets, have all been derived from the products of the crater. It is only through the lava that its inhabitants can penetrate to the springs of water. Its harbors have been filled up with molten matter, and liquid fire has consumed its gardens, overthrown its walls, and buried entire districts. What lava has spared, earthquakes have destroyed;

yet Catania has ever risen like a phoenix from the midst of her blasted ruins, and after each succeeding catastrophe has laid down wider streets, erected loftier palaces, and founded more magnificent churches and convents. There is a part of the walls where the traveler may now see the solid lava curling over the top of the rampart, as if still in the very act of falling. Here the burning flood had accumulated until it rose to the top of the rampart, which was sixty feet in height, and then fell in a fiery cascade, and overwhelmed a part of the city, as previously described.

In reflecting upon the structure and probable origin of volcanoes, we may naturally ask: Are they mountains of rocks kindred with other mountains around them, and do they thus consist of *nuclei* of rock, covered externally with their own ejected products? or do they rise from plains by successive additions of erupted matter, not having original *nuclei* of a different material?

We find that the earliest theories (which may be traced as far back as to the Greek philosophers) were based upon the supposition that the enormous quantities of lava, cinders, and scoriae, ejected in every eruption of Mount Etna, went to compose its entire mass of successive accumulations; and this view is held by many distinguished geologists even at the present time. M. Elie de Beaumont has observed that a profound knowledge of the outline of Etna is almost a theory in itself. The essential character of its profile, as a whole, is a want of continuity in its outline. Between the lateral declivities and the central elevation there is a clearly perceptible break; and the same feature may be observed between the central elevation and the terminal cone. From these distinctions we are led to refer these different parts to different origins.

We proceed to give a brief abstract of this geologist's theory, without committing ourselves to it. Those who would enter into its merits should peruse the objections offered by Sir Charles Lyell, in his *Principles of Geology*—a book so accessible, that we need not cite the arguments themselves. Only a careful study of the existing sketches and notices of the volcano, in all its parts, will enable the student to institute a fair comparison between the two geologists.

It is the opinion of M. Elie de Beaumont, that the primitive nucleus of Etna

is the central elevation, and that this has been formed of upheavals. It may be supposed that the spot on which the central elevation now rises was originally a nearly horizontal plain, the soil of which, being broken up by the action of subterranean fires, has, at different epochs, opened passages to currents of very fluid lava. This lava has spread into thin and uniform sheets around these blow-holes; and, by solidifying, they have formed ledges of rocks, whose compactness depended upon the thickness of the streams. The ejection of these fused substances was accompanied by a violent liberation of elastic fluids, which carried with them large quantities of cinders, scoriae, and *lapilli*. These very solid substances issued from all the fissures; and, falling back in a shower upon the bath of lava, have produced these uniform strata of stony and scoriaceous fragments which alternate with the rocky strata.

Many ages may have passed during the continuance of these phenomena. At last the internal forces, which had so often burst their way through the soil, exhibited an extraordinary energy, probably on account of the ever increasing resistance opposed to their actions by these strata, which had been continually augmenting and solidifying. The internal forces, being unable to burst through these, may have upheaved them; and by this violent movement broken them, until a full communication was maintained between the interior of the earth and the upper air. Before this event, as M. De Beaumont thinks, there must have been, at this point, a multitude of ephemeral volcanoes, which have been replaced by a permanent volcano since that period. But, as the quantity of gaseous matter which escapes from these craters exceeds by very much the volume of lava and scoriae, so we shall readily conceive that the enormous vault formed by the upheaval of Etna would soon require proper support. The very efforts which have given it its elevation would have dislocated it; and it must, to some considerable extent, have fallen back into the abysses which it had covered. To such a recession the celebrated Val del Bove may be regarded as owing its origin; and, if we entertain this idea, we shall easily understand the connection which evidently exists between the craters that surround this valley, and the crater of the volcano itself. These craters are

evidently continuations of one another; and they collectively form the circumference of the bowl which had been upheaved on the surface of the soil. By falling in, the vault exposed a section of the strata of which the escarpments of the valley were all alike composed, and which are again met with on the Piano del Lago, in the interior of a partial sinking.

If we can accept these views, then there was an epoch in which the primitive nucleus of Etna rose solitary in the midst of the plain, towering above the whole island of Sicily, with its abrupt and irregular outlines; but this condition was necessarily subjected to various and rapid modifications. Dating from the present geological epoch, the eruptions which have occurred upon its sides, and round the central elevation, have leveled the base of the mountain, and given rise to lateral slopes, whose declivities and general aspect plainly reveal their origin. These lava-beds, ashes, and scorïa have, as it were, woven a modern vesture, beneath which the volcano concealed its primitive form, and veiled its infancy. Winds, rains, and streams have carried into the plains an enormous mass of these movable substances, and thus gradually formed, at different points, slight elevations of the soil. These secondary causes have incessantly tended to raise the base and to level the plains; and it is to the same cause that we must more especially attribute that general character of flatness exhibited by the entire mass of the mountain, notwithstanding its altitude. The surrounding land may, in the course of ages, be so much elevated in this manner, that the greater part of Etna may be buried beneath its own craters. Yet it is not probable that the primitive nucleus of this volcano will ever altogether disappear; for, strange as it may at first appear, the quantity of material ejected by the terminal crater is so small, that it scarcely suffices to cover the slightly inclined surface of the Piano del Lago. On the steeper declivities this material is only accumulated in the crevices and ravines, in the same manner as may be observed in a slight layer of snow.

Incredible as this fact may seem, and opposed as it is to many commonly received opinions, M. Quatrefages remarks, that it admits of ready proof; for the Torre del Filosofo is only separated from the terminal cone by a distance of about

one hundred yards. This monument is more than two thousand years old; and yet the volcanic products accumulated round its base had only acquired, in 1807, a thickness of nine feet one inch, according to the measurements of Dr. Mario Gemellaro, confirmed by Signor Agatino Recupero. The Piano del Lago, which is situated immediately at the foot of the great crater, does not, therefore, rise each year more, on an average, than one twenty-fifth of an inch from the accumulation of the direct products of the volcano, together with the materials which atmospheric agents may carry away from the cone, and distribute over this nearly horizontal surface. This action is really less than that of the river Nile, the mud of which raises the soil which it fertilizes about one twentieth of an inch annually. Thus, as De Beaumont remarks, the monuments of Thebes and of Memphis are in more rapid process of being buried under the alluvial deposits of the river, than the Torre del Filosofo under the ashes of Etna.

M. De Beaumont allows that the phenomena of upheaval which formerly originated the mountain, are re-produced with less intensity in our own day; and he is of opinion that many of the cones (more particularly the terminal cone) possess a solid nucleus formed by upheaval. He considers that their external shape is due to a covering which is formed by the ejections of the crater, which thus disguise and modify the inequalities of the slopes.

The present terminal cone of Etna is not older than a century. It is formed with considerable rapidity from time to time; and then, as already intimated, sinks into the abysses of the volcano. A few eruptions restore it to nearly its former dimensions. In 1834, the present cone was 1394 feet in height, and its circumference at the base measured no less than 16,410 feet. It is probable that Etna has not yet attained its greatest height; and, in accordance with the views of M. De Beaumont, each new eruption, tending to upheave it, may augment its height to an appreciable degree. Several phenomena might be adduced in support of the opinion that, even in the highest parts of the volcano, the internal forces produce upheaval. A singular illustrative proof of this is given by Recupero, upon the statement of the Padre Massa, who says, that "during the eruption of 1688 there appeared, in the highest part of the vol-

cano, a *large cupola of perfectly white snow*, which rivaled in extent the domes of the largest churches, and in brilliancy the marbles of Paros and of Carrara." Recupero adds that this cupola must have resulted from some violent outburst of subterranean fire, which had raised and curved the superficial strata of the soil that were at the time covered with snow; and M. Quatrefages subjoins, that these strata must have been of considerable thickness, since they were able to protect the snow against the heat of the central fire which had caused their upheaval.

The central elevation and the terminal cone being formed of strata which have been upheaved, and consequently broken at many points, and of movable materials which are simply accumulated together in incoherent masses, can not possess any considerable stability. This is proved by the subsidence visible on the margins of the Piano del Lago, and at other points. Hence, if the crater itself be slow in opening, and if the passages of communication should be clogged or closed, the boiling lava may raise up the vault which confines it, and thus so far detach it from the loosely accumulated materials around. Upheaval is again observable in the great number of eruptions in which the fluid lava has reached the very summit of the orifice, and flowed over the margin of the great crater. The lava could not reach this elevation unless it were upheaved by an enormous force, the action of which could not be merely limited to the vertical tube of the crater, but must necessarily be exerted elsewhere, and possibly even over the whole mass of the mountain. Fissures have been frequently observed which formed a kind of radiation along the face of the volcano, the lines all converging towards the crater as a center. After the eruptions, the margins of some of these fissures were found to display different levels, thus proving elevation or depression of the soil.

Having devoted so much space to the most interesting of volcanic mountains, we shall only passingly refer to some others. Amongst the most impressive and the least known are the volcanoes of Hawaii, one of the Sandwich Islands, memorable for the murder of Captain Cook. The island is of an irregular form, fully 260 miles in circumference, and from shore to shore of volcanic origin and structure. The whole island may be regarded as a

collection of mountains having a common base, which uplifts several cones to heights of 13,000 to 14,000 feet above the level of the sea: Mouna Kea being 13,510 feet high, Mouna Loa, 13,760 feet, and Mouna Hualali, 11,000 feet above the sea level. Of these the second is still in active combustion, and occasionally ejects floods of lava from various points. It is a vast dome, sixty miles in diameter, and nearly three miles in height, having a shoulder or terrace on its eastern slope, in which is situated the active crater of Kilanea; and this from time to time displays the grandest volcanic phenomena. The whole dome appears to be of a bronze color, and its uninterrupted smooth outline is relieved against the deep blue of a tropical sky. Masses of clouds float around it, throwing their shadows upon its sides, whilst a blue haze rests upon the plain in the distance—a plain of volcanoes at an elevation of 4000 feet.

An American missionary and the gentlemen of the United States Exploring Expedition have recently visited the volcano named Mouna Loa, and were much impressed by its active displays, and by its appearance of desolation. Upon it is a lateral crater, several thousand feet below the summit of the mountain, though itself situated (according to our observer) 3970 feet above the sea-level—that is, about the same height as Vesuvius. This is the famous crater of Kilanea, and one of very considerable interest. Its capacity is enormous; for it is three and a half miles long, two and a half wide, and more than a thousand feet deep. The whole city of New-York might be placed in it, and would be almost unnoticed when located at its bottom, or compared with the vast extent around. A black ledge surrounds the whole crater at a depth of 660 feet from the summit edge, and the depth from the black ledge to the bottom is 384 feet. To walk on the black ledge is not always safe; a crackling noise is caused by treading the crisp surface, which resembles that made by walking on frozen snow in very cold weather. Here and there are seen dark pits and vaulted caverns, with heated air rushing from them. From large and extended cracks the air issues at a temperature of 180°. When evening sets in, the more active parts of the crater assume the appearance of a city in flames. Long, intersecting lines of fire glow like streets in a blaze; and when here and

there a more conspicuous burst of flame takes place, fancy may picture a church or some large building becoming a prey to the devouring element. From another point of view the crater appeared to be nearly circular, and to be traversed in all directions by what might be called canals of fire intensely bright. Several of these radiated from a center near the north-east edge, so as to form a star from which coruscations were emitted like jets of burning gas. In other parts furnaces were in terrible activity, and are undergoing continual change, sometimes becoming comparatively dark, and then bursting forth and throwing up torrents of flame and molten lava. All around the edge it was exceedingly agitated, and a noise like that of the surf of the sea was audible. In other localities the stillness heightened the effect of the whole scene of former activity.

The base of the crater consists of an immense sheet of scoriaceous lava, as if suddenly cooled from a state of fusion. The upheaved waves and deep hollows show that congelation has taken place before the mighty agitation had subsided. Dotted with cones sixty or seventy feet high, and extensively intersected by deep cracks from which sulphurous smoke ascends, it is surrounded by a wall about twelve miles in circumference, and is in most parts about a thousand feet below the rim. In the still active parts of the crater there is an enormous caldron, nearly three miles in circumference, filled to within twenty feet of its brim with red molten lava, over which lies a thin scum resembling the slag in a smelting-furnace. The whole surface is in fearful agitation, and great rolling billows of lava follow each other to the sides. When this spot is visited after sunset, the cracks unnoticed during daylight seem to be on fire, and the slag-like surface is semi-transparent, and so extensively perforated as to display one sheet of liquid fire. The waves rise high, and pour over each other in wild confusion, until they form a succession of cascades of surprising grandeur. The canals are now incandescent, the numerous rents are restlessly active, and throw out great volumes of molten lava. These fall with an echoless, lead-like sound, breaking the otherwise impressive stillness.

A remarkable eruption from this crater occurred in 1840. The lava, which had

risen high in the great chasm, began to escape from it. A change took place in the level of the lava, so that it sank gradually for six weeks, or until the eruption ceased, when the great caldron or lake of lava stood 400 feet lower than at the commencement of the outbreak. Thus there was proved to be a passage of the fluid matter under the surface, and it was supposed to have been at its first outflow 1000 feet below the surface. When it had found its subterranean way for about two miles, the fiery flood broke out, and spread itself superficially over fifty acres of land, and then again found a course underground for several miles farther towards the sea, reappearing at the bottom of an ancient wooded crater which it partly filled up. Again, the course of the fluid mass became invisible for several miles, until for the last time it burst forth at a point which was afterwards ascertained to be 1244 feet above the sea, and twenty-seven miles from the original crater. From thence it poured along in the open air for twelve miles, and then leaped over a cliff fifty feet high, and ran into the sea during the space of three weeks. Its termination was at a spot about forty miles from its mountain source. The crust of the earth overlying the subterranean course of the lava was often traversed by innumerable fissures, which emitted steam; and in some places the incumbent rocks were uplifted twenty or thirty feet. There is no exactly similar instance in the history of eruptions. Subsequent outbursts have taken place, and one very recently. This crater, therefore, is one of the most active on the globe.

The outbreak of a volcano in Java produced perhaps as destructive effects as any known in modern times. This took place in the mountain of Galung Gung, which in 1822 was covered by a dense forest, and situated in a fruitful and thickly peopled part of Java. In July of that year, the waters of a river which flowed from its flanks, became for a time hot and turbid. On the eighth of October following, a terrifically loud explosion was heard, the earth shook, and immense columns of water and boiling mud, mingled with burning brimstone, ashes, and *lapilli*, as large as nuts, were projected from the mountain like a water-spout, with such prodigious violence that large quantities fell beyond a river forty miles distant. Every valley within the range of this

eruption became filled with a burning torrent. The rivers, swollen with hot water and mud, overflowed their banks, and carried away great numbers of the people, who were endeavoring to escape; and also the bodies of cattle, wild beasts, and birds. It is affirmed that no less a space than twenty-four miles between the mountains and the river Tandoi was covered with bluish mud to such a depth that people were buried in their houses, and not a trace of the numerous villages and plantations throughout that extent of space was visible. The bodies of those who perished within this distance were buried in mud and concealed; but near the more immediate limits of the volcanic force, they were exposed and thrown over the ground in great numbers, some being partially boiled, some partly burnt. It was observed that the boiling mud and cinders were projected from the volcano with such violence, that while many remote villages were utterly destroyed and buried, others situated much nearer to the mountain were uninjured.

The first eruption lasted nearly five hours. On the following day the rain fell in torrents, and the rivers, densely loaded with mud, deluged the country far around. A second eruption, more violent than the first, occurred after four days. In this, hot water and mud were again vomited forth, and large blocks of basalt were cast to the distance of seven miles from the volcano. At the same time a violent earthquake was felt, and it is stated in one account, that the face of the mountain was entirely changed. Its summits were broken down; and one side, which had previously been covered with trees, became an enormous gulf, and took the shape of a semi-circle. This cavity was formed about mid-way between the mount and the plain, and was surrounded by steep rocks said to be newly accumulated during the eruption. The rivers Banjarang and Toulau changed their course, and new hills and valleys are affirmed to have been formed. In one night two thousand persons were killed. The official account states that altogether one hundred and fourteen villages were destroyed, and more than four thousand persons deprived of life, by this terrible catastrophe.*

We may now proceed to speak of the forces which produce such tremendous results. If we take the specific gravity of lava to be 2.8, the following table will show the force requisite to cause it to flow over the tops of the several volcanoes enumerated. From this table several popular illustrations of the enormous force of volcanoes might be deduced. The reader will understand that *one* atmosphere represents a pressure of fifteen pounds on a square inch, being that of our atmosphere. Consequently, to ascertain the pressure in pounds, in each instance, the figures in the several columns must be multiplied by 15.

Name of Volcano.	Height, in feet, above the sea.	Force exerted upon the lava, in atmospheres.	Initial velocity, in feet, per second.
Stromboli, (highest peak.)	2168	176	371
Vesuvius,	3874	314	496
Jorullo, Mexico,	2942	319	562
Hekla, Iceland,	5106	418	570
Etna,	10892	882	832
Teneriffe,	12465	1009	896
Mouna Kea, Hawaii,	14700	1191	966
Popocatepetl, Mexico,	17712	1485	1062
Mount Elias,	18079	1465	1072
Cotopaxi, Quito,	18869	1492	1104

But the above figures must be considerably under the actual dynamical results; for there can be little doubt that the chimney of a volcano extends in general as much below the level of the sea as it does above. Probably it is often many times as deep. Thus the actual force pressing upon the lava in its reservoir may, and frequently must be, far greater than the amount given in this table, and the initial velocity (col. 3.) must likewise be greater.

The extraordinary effects of volcanic energy have already been illustrated by our details of particular eruptions; and these probably have never been exceeded, and very rarely equaled. We may here mention, in addition, as to distance and intensity, that during the eruption of Vesuvius in 472-473, the ashes ejected were transported by the winds to Africa, Syria, and Egypt, and also fell in Constantinople. Ships were covered, in 1631, with ashes from Vesuvius, while sailing twenty leagues away from it. The Souffrière mountain, in St. Vincent, gave forth ashes at the eruption in 1812, which were carried by the winds to Barbadoes. A terrific eruption of Tomboro, in Sumbawa, happened in 1815, when clouds of ashes obscured the sun, covered the streets and houses in Java for some inches in depth, and this at a distance of three hundred miles.

* Official Report of the President, Baron Van der Capellen, cited by Lyell.

Cotopaxi has propelled by ejection from its crater, blocks of ten cubic yards, weighing about thirty tons, to a distance of nine miles. Stones eight pounds in weight were thrown six miles by Vesuvius, namely, to Pompeii. Sir William Hamilton observed stones to be thrown so high above the mountain-tops, that they occupied eleven seconds in falling, which gives a height of two thousand feet, and an initial velocity of three hundred and fifty feet in a second. At a violent eruption in Teneriffe, in 1798, the mountain threw out stones so high that twelve or fifteen seconds were counted during their descent, giving consequently from two thousand five hundred to three thousand six hundred feet, and an initial velocity of from three hundred and eighty to four hundred and eighty feet per second. The pressure of a whole column of lava, which should overflow the crater of Teneriffe, would (according to D'Aubuisson) be equal to one thousand atmospheres, or, as we have enumerated in the above table, one thousand and nine atmospheres.

"Man is small and feeble, but full of pride," says M. Quatrefages, "and he always takes himself as the unit, and as a term of comparison. He measures the globe and the universe by his own stature, and the infinite powers of nature by his own forces. In his eyes, Etna, that blow-hole which is scarcely perceptible upon our planet, which is about 24,000 miles in circumference, is a gigantic mountain, and he starts back in amazement at the forces which are required to upheave it. It is not very difficult, however, to convince one's self that in volcanic phenomena the energy of the cause is fully in harmony with the greatness of the effects.

"Let us then, by way of illustration, inquire what relation exists between the forces employed at the present day by industrial science, and those which slumber within the crater of Etna. Let us suppose—and the assumption is by no means exaggerated—that this crater is five hundred yards in diameter, and that it penetrates below the earth to a depth equal to the height of the mountain.

"The magnificent steam-engines which exhaust the air on the atmospheric line of St. Germain (near Paris) have a four hundred horse power. They act under a pressure of six atmospheres, and their pistons present a surface of more than three square yards. In approximate calculations like this, the pressure of an atmosphere on a surface whose extent we know, may be regarded as equal to the weight of a column of water of the same base, and of eleven yards in height. Consequently the total effect produced by the machines of Saint-Germain may be represented by a weight of about 150 tons.

"A column of water raised from the level of

the sea to the summit of Etna, would exert a pressure of 300 atmospheres; but the fluid lava is nearly three times heavier than water. Consequently, when this lava flows over the margin of the terminal cone, its pressure at the level of the plain will equal the force of 900 atmospheres, while its force at the bottom of the crater itself will equal to the pressure of 1800 atmospheres. The weight of this pressure on every square yard or surface will therefore be equal to more than 40,000 tons.

"Now we know that the pressure of liquids is exerted in all directions at once. Consequently each square yard of the vault which supports the volcano is subjected to a force acting from below upwards, which is 288 times greater than the machines of Saint-Germain. In the crater alone, the total force which is solely employed in sustaining the column of lava at the level of the orifice is equal to 53,262,500 times that of these machines. This is a force of more than twenty-one thousands of millions of horses.

"Hitherto we have supposed that the steam-engine was in perfect working order, and that the lava rose easily to the margin of the crater. In the steam-engine the safety-valves become clogged, and are no longer available at the right moment; innumerable causes, some of which still unknown, bring about the sudden evaporation of too large a quantity of water. In this case the boilers burst, and, rending the most solid walls, throw the fragments far around them. Under circumstances such as these, masses of fused metal weighing two tons have been projected to a distance of 250 yards. Now volcanoes have also their explosions, or, more correctly speaking, their eruptions are to a certain extent one continuous explosion, and the preceding remarks will show how extensively powerful must be their action.

"To appreciate completely the forces which are put in action, it will be necessary to add the pressures that we have already calculated, also the tumultuous liberation of vapors and gases, and the frightful degree of tension to which these elastic fluids must be subjected at a temperature capable of liquefying the hardest rocks. It would be necessary to multiply the upward pressure resulting from these combined forces not merely by the surface of the crater, but by the extent of the bore, which may perhaps embrace the entire central elevation; and we should then obtain numbers representing a force of which nothing would be able to give us any adequate idea, if the mountain itself did not exist as a monument of this formidable power."^{*}

Let us assume that the pressure of steam necessary to raise felspathic lava five miles may be taken in round numbers as two thousand atmospheres. Then, although this immense pressure is consi-

^{*} *Rambles of a Naturalist*, vol. ii. p. 171.

derable, yet it seldom or ever had been brought into mechanical action by human creatures. Only of late years have we found any approach amongst men to such figures. Messrs. Hopkins and Fairbairn, at the request of the British Association for the Advancement of Science, accumulated pressures equal to those of the highest mountains, arriving even at the pressure a column of water of thirty-three miles. Were such a pressure as this in action, and were it unrelieved by volcanic rents, it would lift up large tracts of solid land; and it may even now be operating in this manner. To such a force we may attribute the uplifting of the western coast of South-America in 1822, when, through a space of one thousand miles in length, the level of land and sea was altered, and the ground was in many places permanently raised. Thus, too, entire provinces have been raised gradually and continuously, as, for example, a portion of Scandinavia. Considerable islands have lifted themselves up from the bottom of the sea, and have afterwards vanished as rapidly as they appeared. We have no space to enumerate the recorded instances of the appearance and disappearance of some volcanic islands, and of the permanence of others. The number of these islands would surprise the unprepared reader, as in the instance of the Aleutian islands, and the Azores, where, in 1757, nine new islands were formed in less than a twelvemonth. In the very bosom of the opposing elements rise up the hearths and fountains of fire, and the quenching waters flow into the very furnaces which have once raged with terrific flames, while the liquid masses of lava have rolled down in fiery streams to meet their natural foe, and have only paused and failed when they had advanced far into the drowning depths of the ocean.

Such are some of the more unquestionable tokens of the agency of fire in the elevation and alteration of large portions of our earth. Many of the largest volcanoes appear to have burnt themselves out, and now stand like blasted and scathed monuments of ancient combus-

tion. On their scarred sides the courses of primeval lava-streams can be continuously traced—fiery streams that seethed and swelled long before man walked the earth. All these marks of a world-old incandescence have a special interest for the geologist; but they possess also a higher interest seldom adverted to—an interest for the believer in revelation, an intense interest for every expectant of “a new heaven and a new earth, wherein dwelleth righteousness.” To one who should be unacquainted with the forces and frequency of volcanic phenomena, it would seem a strange thing to prophesy that this ocean-girded globe shall be finally consumed by fire. But to one well informed upon these points nothing will appear more probable than that “the earth, and all the works therein, shall be burned up.” One hour’s relaxation of the repressing power of the Omnipotent—one upraising of his finger from off the subdued springs of irrepressible force—and immediately, from ten thousand rents of the cleft and riven earth, would burst forth innumerable fires, and the solid masses composing the exterior envelope of the globe would become molten seas; “the mountains would indeed flow down at his presence, as when the melting fire burneth, the fire causeth the waters to boil.” “The hills would melt lik wax at the presence of the Lord;” and it would then be acknowledged, in a sense infinitely more terrific than was conceived of old—“For a fire is kindled in mine anger, and shall burn unto the lowest hell, and shall consume the earth with her increase, and set on fire the foundations of the mountains.” (Dent. 32 : 22.) Having, then, plain prognostications of the future from far-spreading and desolate fields of lava and cinders and ashes, from the once flaming beacons of lofty mountains, and from cities and villages and vineyards buried under the heavy clouds of ejected ashes, we may well repeat and apply the inference of an apostle: “Seeing then that all these things shall be dissolved, what manner of persons ought ye to be in all holy conversation and godliness?”

From Titan.

ILLUSTRATIVE SKETCHES OF THE REIGN OF HENRY VIII.

I MUST now take my reader below the surface of outward events to the undercurrent of the war of opinions, where the forces were generated which gave to the time its life and meaning. Without some insight into this region, history is but a dumb show of phantoms; yet, when we gaze into it with our best efforts, we catch but fitful images and fleeting pictures. In palace and cottage, in village church and metropolitan cathedral, at the board of the Privy Council, or in the roadside ale-house, the same questions were discussed, the same passions were agitated. A mysterious change was in process in the minds of men. They knew not what it was—they could not control its speed or guide its direction. The articles and the settlement of 1536 were already buried under the froth of the insurrection. New standing-ground was to be sought for, only in its turn to slip away as it seemed to be gained. And the teachers and the taught, the governors and the governed, each separate human being, left to his own direction, was whirled along the rapids which formed the passage into a new era. A few scenes out of this strange time have been preserved for us in the records. They may pass one by one before us like the pictures in a magic slide.

The first figure that appears is a "friar mendicant, living by the alms of the king's subjects, forming himself to the fashions of the people." He is "going about from house to house, and when he comes to aged and simple people he will say to them: 'Father or sister, what a world this is! It was not so in your father's days. It is a perilous world. They will have no pilgrimages. They will not we should pray to saints, or fast, or do any good deeds. O Lord! have mercy on us! I will live as my forefathers have done. And I am sure your fathers and friends were good, and ye have followed them hitherto. Continue ye as ye have done, and believe as they believed.'"

The friar disappears. A neighbor of the new opinions, who has seen him come and go, takes his place, and then begins an argument. One says: "My father's faith shall be my faith." And the other, hot and foolish, answers: "Thy father was a liar and is in hell, and so is my father in hell also. My father never knew Scripture, and now it is come forth."

The slide again moves. We are in a village church, and there is a window gorgeously painted, representing the various events in the life and death of Thomas à Becket. The King sits on his throne, and speaks fiercely to his four knights. The knights mount their horses and gallop to Canterbury. The Archbishop is at vespers in the quire. The knights stride in and smite him dead. Then follows the retribution. In the great central compartment of the window the haughty prince is kneeling naked before the shrine of the martyr, and the monks stand round him and beat him with their rods. All over England in such images of luminous beauty the memory of the great victory of the clergy had been perpetuated. And now the particular church is Woodstock, the court is at the park, and day after day, notwithstanding the dangerous neighborhood, in the church aisles groups of people assemble to gaze upon the window, and priests and pardoners expatiate with an obvious application on the glories of the martyr, the Church's victory, and the humiliation of the King. Eager ears listen; eager tongues draw comparisons. A groom from the court is lounging among the crowd, and interrupts the speakers somewhat disdainfully; he says that he sees no more reason why Becket was a saint than Robin Hood. No word is mentioned of the profanity to Henry; but a priest carries the story to Gardiner and Sir William Paulet. The groom is told that he might as well reason of the King's title as of St. Thomas's: forthwith he is hurried off under charge of heresy to the Tower;

and, appealing to Cromwell, there follows a storm at the council-table.

We are next at Worcester, at the Lady Chapel, on the eve of the Assumption. There is a famous image of the Virgin there, and to check the superstition of the people, the gorgeous dress has been taken off by Cromwell's order. A citizen of Worcester approaches the figure: "Ah, Lady," he cries, "art thou stripped now? I have seen the day that as clean men had been stripped at a pair of gallows as were they that stripped them." Then he kisses the image, and turns to the people and says: "Ye that be disposed to offer, the figure is no worse than it was before," "having a remorse unto her."

The common treads close upon the serious. On a summer evening a group of villagers are sitting at the door of an ale-house on Windermere; a certain master Alexander, a wandering ballad-singer, is "making merry with them." A neighbor Isaac Dickson saunters up and joins the party.

"Then the said Isaac commanded the said minstrel to sing a song he had sung at one Fairbank's house in Crossthwaite, in the county of Westmoreland, in the time of the rebellion, which song was called 'Crummock,' which was not convenient, which the said minstrel utterly denied. The said Isaac commanded the said minstrel again in a violent manner to sing the song called 'Cromwell,' and the said minstrel said he would sing none such; and then the said Isaac pulled the minstrel by the arm, and smote him about the head with the pommel of a dagger, and the same song the minstrel would not sing to die for. The third time the said Isaac commanded the minstrel to sing the same song, and the minstrel said it would turn them both to anger, and would not. And then did Isaac call for a cup of ale, and bade the minstrel sing again, which he always denied; then Isaac took the minstrel by the beard and dashed the cup of ale in his face; also, he drew his dagger and hurt master Willan, being the host of the said house, sore and grievously in the thigh, in rescuing of the said minstrel."

Again, we find accounts of the reception which the English Bible met with in country parishes.

A circle of Protestants at Wincanton, in Somersetshire, wrote to Cromwell complaining of the curate, who would not

teach them or preach to them, but "gave his time and attention to dicing, carding, bowling, and the cross waster." In their desire for spiritual food they applied to the rector of the next parish, who had come occasionally and given them a sermon, and had taught them to read the New Testament; when suddenly, on Good Friday, "the unthrifty curate entered the pulpit, where he had set no foot for years," and "admonished his parishioners to give no credence to the new-fangled fellows which read the new book." "They be like knaves and Pharisees," he said; "they be like a dog that gnaweth a marry-bone, and never cometh to the pith, therefore avoid their company; and if any man will preach the New Testament, if I may hear him, I am ready to fight with him incontinent;" and "indeed," the petitioners said, "he applyeth in such wise his school of fence so sore continually, that he feareth all his parishioners."

So the parish clerk at Hastings made a speech to the congregation on the faults of the translation: "It taught heresy," he said; "it taught that a priest might have a wife by God's law. He trusted to see the day that the book called the Bible, and all its maintainers and upholders, should be brent."

Here, again, is a complaint from the parishioners of Langham in Essex, against their village potentate, a person named Vigourous, who with the priests oppressed and ill-used them.

"Upon Ascension-day last past did two maidens sit in their pew or school in the church, as all honest and virtuous persons use to do in matins time, saying their matins together upon an English primer. Vigourous this seeing was sore angry, in so much that therefore, and for nothing else, he did bid the maidens to avoid out of the church, (calling them) errant whores, with such other odious and spiteful words. And further, upon a time within this year, one of Vigourous's servants did quarrel and brawl with other children many, whom he called heretics; and as children be light and wanton, they called the said servant again Pharisee. Upon this complained Robert Smyth of our town to Vigourous, saying that it was against reason that the great fellow his servant should quarrel and fight with children. Whereupon Vigourous said to his servant: 'See that thou do cut off their

ears, O errant whoreson! if they so call thee hereafter; and if thou lack a knife, I shall give thee one to do it. And if thou wilt not thus do, thou shalt no longer serve me.'"

On the other hand, the Protestants gave themselves no pains to make their heterodoxy decent, or to spare the feelings of their antagonists. To call "a spade a spade," and a rogue a rogue, were Protestant axioms. Their favorite weapons were mystery plays, which they acted up and down the country in barns, and taverns, in chambers, on occasion, before the vicar-general himself; and the language of these, as well as the language of their own daily life, seemed constructed as if to pour scorn on the old belief. Men engaged in a mortal strife usually speak plainly. Blunt words strike home, and the euphuism which, in more ingenious ages, discovers that men mean the same thing when they say opposite things, was unknown, or at least unappreciated. We have heard something of the popular impieties, as they were called in the complaints of Convocation. I add a few more expressions taken at random from the depositions. One man said, "he would as soon see an oyster-shell above the priest's head at the sacring time as the wafer. If a knave priest could make God, then would he hire one such God-maker for a year, and give him twenty pounds to make fishes and fowls." Another said that "if he had the cross that Christ died on, it should be the first block he would rive to the fire for any virtue that was in it." Another, "that a shipload of friars' girdles, nor a dungcart full of friars' cows and boots, would not help to justification."

On both sides the same obstinate English nature was stirred into energetic hate.

Or, once more to turn to the surviving abbey, here, too, each house was "divided against itself, and could not stand." The monks of Stratford complained to Sir Thomas Cholmondeley that their abbot had excommunicated them for breach of oath in revealing convent secrets to the royal visitors. Their allegiance, the brave abbot had said, was to the superior of their order abroad, not to the secular sovereign in England. He cared nothing for acts of parliament or king's commissions. The King could but kill him, and death was a small matter compared to

perjury. Death, therefore, he resolutely risked, and in some manner we know not how he escaped. Another abbot with the same courage was less fortunate. In the spring and summer of 1537, Woburn Abbey was in high confusion. The brethren were trimming to the times, anxious merely for secular habits, wives, and freedom. In the midst of them, Robert Hobbes the abbot, who in the past year had accepted the oath of supremacy in a moment of weakness, was lying worn down with sorrow, unable to govern his convent, or to endure the burden of his conscience. On Passion Sunday in that spring, dying, as it seemed, of a broken heart, he called the fraternity to his side, and exhorted them to charity, and prayed them to be obedient to their vows. Hard eyes and mocking lips were all the answer of the monks of Woburn. "Then, being in a great agony, the abbot rose up in his bed, and cried out, and said: 'I would to God it would please him to take me out of this wretched world, and I would I had died with the good men that have suffered death for holding with the Pope. My conscience—my conscience doth grudge me for it.'" Abbot Hobbes should have his wish. Strength was left him to take up his cross once more where he had cast it down. Spiteful tongues carried his words to the council, and the law, remorseless as destiny, flung its meshes over him on the instant. He was swept up to London and interrogated in the usual form: "Was he the king's subject or the Pope's?" He stood to his faith like a man, and the scaffold swallowed him.

So went the world in England, rushing forward, rocking and reeling in its course. What hand could guide it! Alone, perhaps, of living men, the King still believed that unity was possible—that these headstrong spirits were as horses broken loose, which could be caught again and harnessed for the road. For a thousand years there had been one faith in Western Christendom. From the Isles of Arran to the Danube thirty generations had followed each other to the grave who had held all to the same convictions, who had prayed all in the same words. What was this that had gone out among men that they were so changed? Why, when he had but sought to cleanse the dirt from off the temple, and restore its original beauty, should the temple itself crumble into ruins?

The sacraments, the divine mysteries, had existed in the Church for fifteen centuries. For all those ages they had been supposed to be the rivulets which watered the earth with the graces of the Spirit. After so long experience it should have been at least possible to tell what they were, or how many they were; but the question was suddenly asked, and none could answer it. The bishops were applied to. Interrogatories were sent round among them for opinions, and some said there were three sacraments, some seven, some a hundred. The Archbishop of York insisted on the apostolical succession; the Archbishop of Canterbury believed that priests and bishops might be nominated by the crown, and he that was so appointed needed no consecration, for his appointment was sufficient. Transubstantiation remained almost the only doctrine beyond the articles of the three creeds on which a powerful majority was agreed.

Something, however, must be done. Another statement must be made of the doctrine of the Church of England—if the Church of England were to pretend to possess a doctrine—more complete than the last. The slander must be put to silence which confounded independence with heresy; the clergy must be provided with some guide to their teaching which it should be penal to neglect. Under orders, therefore, from the crown, the bishops agreed at last upon a body of practical divinity, which was published under the title of "The Bishops' Book" on "the Institution of a Christian Man." It consisted of four commentaries, on the creed, the sacraments, the ten commandments, and the Lord's prayer, and in point of language was beyond question the most beautiful composition which had as yet appeared in English prose. The doctrine was moderate, yet more Catholic, and in the matter of the sacraments, less ambiguous than the articles of 1536. The mystic number seven was restored, and the nature of sacramental grace explained in the old manner. Yet there was a manifest attempt, rather, perhaps, in visible tendency than in positive statement, to unite the two ideas of symbolic and instrumental efficacy, to indicate that the grace conveyed through the mechanical form is the spiritual instruction indicated in the form of the ceremony. The union among the bishops which appeared in the

title of the book was in appearance only, or rather it was assumed by the will of the King, and in obedience to his orders. When the doctrines had been determined by the bench, he even thought it necessary to admonish the composers to observe their own lessons.

"Experience," he wrote to them, "has taught us that it is much better for no laws to be made, than when many be well made none to be kept; and even so it is much better nothing should be written concerning religion, than when many things be well written nothing of them be taught and observed. . . . Our commandment is, therefore, that you agree in your preaching, and that vain praise of crafty wits and worldly estimation be laid aside, and true religion sought for. You serve God in your calling, and not your own glory or vile profit. We will no correcting of things, no glosses that take away the text; being much desirous, notwithstanding that if in any place you have not written so plainly as you might have done, in your sermons to the people you utter all that is in God's Word. We will have no more thwarting—no more contentions whereby the people are much more set against one another than any taketh profit by such indiscreet doctrines. We had much sooner to pray you than command you, and if the first will serve we will leave out the second. Howbeit, we will in any case that all preachers agree; for if any shall dissent, let him that will defend the worse part assure himself that he shall run into our displeasure."

"The wind bloweth where it listeth, and we hear the sound thereof, but we can not tell whence it cometh nor whither it goeth; so is every one that is born of the Spirit." As easily could Henry bind the winds, and bid them blow at his pleasure, as force the mind of England thenceforward into any single mould. Under conditions and within limits which he did not imagine, some measure of the agreement which he desired would be at last accomplished when the time and season would permit. Meanwhile, though his task was an impossible one, it was better to try and fail, than to sit by and let the storm rage. Nor was Henry a man to submit patiently to failure. He would try and try again; when milder methods were unsuccessful, he would try with bills of six articles, and pains and penalties. He was wrestling against destiny; yet

then, now, and ever it was, and remains true, that in this great matter of religion, in which to be right is the first condition of being right in any thing—not variety of opinion, but unity—not the equal license of the wise and the foolish to choose their belief, but an ordered harmony, where wisdom prescribes a law to ignorance, is the rule which reasonable men should most desire for themselves and for mankind.

But if Henry erred, his errors might find excuse in the multitude of business which was crowded upon him. Insurrection and controversy, foreign leagues, and Papal censures, did not exhaust the number of his difficulties. All evil things in nature seemed to have combined to thwart him.

In the few first years after he became king, he had paid particular attention to the navy. He had himself some skill as a naval engineer, and had conducted experiments in the construction of hulls and rigging, and in ship artillery. Other matters had subsequently called off his attention, and especially since the commencement of the Reformation every moment had brought with it its own urgent claims, and the dockyards had fallen into decay. The finances had been straitened by the Irish wars, and from motives of economy the ships which the government possessed had fallen many of them out of commission, and were rotting in harbor. A few small vessels were kept on the coast of Ireland; but in the year 1536 there was scarcely in all the Channel a single royal cruiser carrying the English flag. Materials to man a fleet existed amply in the fishermen who went year after year in vast numbers to Iceland and to Ireland—hardy sailors, who, taught by necessity, went always armed, and had learnt to fight as well as to work; but, from a neglect not the less injurious, because intelligible, the English authority in their own waters had sunk to a shadow. Pirates swarmed along the coasts—entering fearlessly into the harbors, and lying there in careless security. The war breaking out between Charles and Francis, the French and Flemish ships of war captured prizes or fought battles in the mouths of English rivers, or under the windows of English towns; and though preying upon each other as enemies in the ordinary sense, both occasionally made prey of heretic English as enemies of the

Church. While the courts of Brussels and Paris were making professions of good-will, the cruisers of both governments openly seized English traders and plundered English fishing-vessels, and Henry had for many months been compelled by the insurrection to submit to these aggressions, and to trust his subjects along the coasts to such inadequate defenses as they could themselves provide. A French galliass and galleon came into Dartmouth harbor and attempted to cut out two merchantmen which were lying there. The mayor attacked them in boats and beat them off; but the harbors in general were poorly defended, and strange scenes occasionally took place in their waters. John Arundel, of Trecice, reports the following story to Cromwell: "There came into Falmouth haven a fleet of Spaniards, and the day after came four ships of Dieppe, men-of-war, and the Spaniards shot into the Frenchmen, and the Frenchmen shot into the Spaniards, and during three hours great guns shot between them, and the Frenchmen were glad to come higher up the haven; and the morrow after St. Paul's day the Spaniards came up to assault the Frenchmen, and the Frenchmen came up almost to the town of Truro, and went aground there. I went to the admiral of the Spaniards and commanded him to keep the king's peace, and not to follow further; but the Spaniard would not, but said: 'I will have them, or I will die for it.' And then the Spaniards put their ordnance in their boats, and shot the French admiral forty or sixty shots during a long hour, the gentlemen of the city, Mr. Killigrew and Mr. Trefusis, and others, taking pleasure at it. Then I went to the Spaniards and told them to leave their shooting, or I would raise the country upon them. And so the Spaniards left. My lord, I and all the country will desire the King's grace that we may have blockhouses made upon our haven."

Pirates were enemies to which the people were accustomed, and they could in some measure cope with them; but commissioned vessels of war had now condescended to pirates' practices. Sandwich boatmen were pillaged by a Flemish cruiser in the Downs in the autumn of 1536. A smack belonging to Deal was twice boarded and robbed by a Flemish officer of high rank, the admiral of the Sluys.

The king had for several years been engaged in making a harbor of refuge at Dover. The workmen saw English traders off the coast, and even the very vessels which brought the iron and timber for the harbor-piers, plundered by French and Flemings under their eyes; and the London merchants declared that, although the country was nominally at peace, their ships could not venture out of port unless the government would undertake their convoy. The remonstrances which were made, of course in loud terms, at Paris and Brussels, were received with verbal apologies, and the queen regent gave orders that her cruisers should cease their outrages; but either their commanders believed that their conduct would be secretly winked at, or they could not be convinced that heretics were not lawful game; or perhaps the zealous subjects of the Catholic powers desired to precipitate the sluggish action of their governments. At any rate, the same insolences continued, and no redress could be obtained.

Henry could not afford to declare war. The exchequer was ill-furnished. The rebellion had consumed the subsidy, and the abbey lands had as yet returned little profit either by their rentals or by sale. The country, however, had not yet sunk so low as to be unable to defend its own coasts and its own traders. Sufficient money was found for the immediate purpose, and a small but admirably equipped fleet was fitted out silently at Portsmouth. Sir Thomas Seymour, the queen's brother, Sir George Carew, Sir John Dudley, and Christopher Coe, a rough English sailor, were appointed to the command; and, when the ships were ready, they swept out into the Channel. Secrecy had been observed as far as possible, in the hope of taking the offenders by surprise. The greater number of them had, unhappily, been warned, and had escaped to their own harbors; but Coe shortly brought two pirate prizes into Rye. The people of Penzance, one August afternoon, heard the thunder of distant cannon. Carew and Seymour, searching the western coast, had come on the traces of four French ships of war, which had been plundering. They came up with them in Mounts Bay, and, closing against heavy odds, they fought them there till night. At day-break, one of the four lay on the water, a sinking wreck. The others had crawled

away in the darkness, and came no more into English waters. Dudley had been even more fortunate. "As he was lying between the Needles and the Cowe," there came a letter to him from the Mayor of Rye, "that the Flemings had boarded a merchant-ship belonging to that port, and had taken goods out of her valued at three hundred pounds." "That hearing," he said, in his dispatch to Henry, "I, with another of your Grace's ships, made all the diligence that was possible towards the said coast of Rye; and, as it chanced, the wind served us so well, that we were next morning before day against the Combe, and there we heard news that the said Flemings were departed the day before. Then we prepared towards the Downs, for the wind served for that place, and there we found lying the admiral of the Sluys, with one ship in his company besides himself, being both as well trimmed for the war as I have lightly seen. And when I had perfect knowledge that it was the admiral of the Sluys, of whom I had heard, both at Rye and at Portsmouth, divers robberies and ill-demeanors by him committed against your Highness's subjects, then I commanded my master to bring my ship to an anchor, as nigh to the said admiral as he could, to the intent to have had some communication with him; who incontinent put himself and all his men to defense, and neither would come to communication nor would send none of his men aboard of me. And when I saw what a great brag they set upon it—for they made their drumsalt to strike alarum, and every man settled them to fight—I caused my master gunner to loose a piece of ordnance, and not touched him by a good space; but he sent one to my ship, and mocked not with me, for he brake down a part of the decks of my ship, and hurt one of my gunners very sore. That done, I trifled no more with him, but caused my master to lay her aboard; and so, within a little fight, she was yielded." Dudley's second ship had been engaged with the other Fleming; but the latter, as soon as the admiral was taken, slipped her cable and attempted to escape. The Englishman stood after her. Both ships vanished up Channel, scudding before a gale of wind; but whether the Dutchman was brought back a prize, or whether the pursuer followed too far, and found himself, as Dudley feared, caught on a lee

shore off the Holland flats, the records are silent. Pirates, however, and overzealous privateers, in these and other encounters, were taught their lesson; and it did not, for some time, require to be repeated: "Your subjects," Dudley and Seymour told the king in a joint letter, "shall not only pass and repass without danger of taking, but your Majesty shall be known to be lord of these seas." They kept their word. In this one summer the Channel was cleared, and the nucleus was formed of the fleet which, eight years after, held in check and baffled the most powerful armament which had left the French shores against England since the Norman William crossed to Hastings.

But Henry did not rest upon his success. The impulse had been given, and the work of national defense went forward. The animus of foreign powers was evidently as bad as possible. Subjects shared the feelings of their rulers. The Pope might succeed, and most likely would succeed at last, in reconciling France and Spain; and experience proved that England lay formidably open to attack. It was no longer safe to trust wholly to the extemporized militia. The introduction of artillery was converting war into a science; and the recent proofs of the unprotected condition of the harbors should not be allowed to pass without leaving their lesson. Commissions were issued for a survey of the whole eastern and southern coasts. The most efficient gentlemen residing in the counties which touched the sea were requested to send up reports of the points where invading armies could be most easily landed, with such plans as occurred to them for the best means of throwing up defenses. The plans were submitted to engineers in London; and in two years every exposed spot upon the coast was guarded by an earthwork, or a fort or blockhouse. Batteries were erected to protect the harbors at St. Michael's Mount, Falmouth, Fowey, Plymouth, Dartmouth, Torbay, Portland, Calshot, Cowes, and Portsmouth. Castles (some of them remain to the present day) were built at Dover, Deal, Sandwich, and along both shores of the Thames. The walls and embankments at Guisnes and Calais were repaired and enlarged; and Hull, Scarborough, Newcastle, and Berwick-upon-Tweed were made impregnable against ordinary attack. Each of these

places was defended by adequate and trained garrisons; and the musters were kept in training within twenty miles of the coast, and were held in readiness to assemble on any point at any moment.

Money was the chief difficulty. The change in the character of war created unforeseen expenses of many kinds. The cost of regular military and naval establishments, a new feature in the national system, was thrown suddenly on the crown; and the revenue was unequal to so large a demand upon it. A fresh political arrangement was displacing the old; and the finances were necessarily long disordered before the country understood its condition, and had devised methods to meet its necessities.

At this conjuncture the abbey lands were a fortunate resource. They were disposed of rapidly—of course on easy terms to the purchasers. The insurrection, as we saw, had taught the necessity of filling the place of the monks with resident owners, who would maintain hospitality liberally, and on a scale to contrast favorably with the careless waste of their predecessors. Obligations to this effect were made a condition of the sales, and lowered naturally the market value of the properties. Considerable sums, however, were realized, adequate for immediate objects, though falling short of the ultimate cost of the defenses of the country. At the same time the government works found labor for the able-bodied beggars, those sturdy vagrants whose living had been gathered hitherto at the doors of the religious houses, varied only with intervals of the stocks and the cart's-tail.

Thus the spoils of the Church furnished the arms by which the Pope and the Pope's friends could be held at bay; and by degrees in the healthier portion of the nation an English enthusiasm took the place of a superstitious panic. Loyalty towards England went along with the Reformation, when the Reformation was menaced by foreign enemies; and the wide disaffection which in 1536 had threatened a revolution, became concentrated in a vindictive minority, to whom the Papacy was dearer than their country, and whose persevering conspiracies taught England at no distant time to acquiesce with its whole heart in the wisdom which chained them down by penal laws as traitors and enemies to the commonwealth.

From the National Review.

CHARLATAN POETRY: MARTIN FARQUHAR TUPPER.*

MR. MARTIN FARQUHAR TUPPER'S *Proverbial Philosophy* is the most popular book of verses of its day. It began its career not long after the issue of Tennyson's earliest poems, and has reached its thirty-third edition, exclusive of library and illustrated editions, while the poet-laureate's principal volume is still in its eleventh. Nay, Mr. Tupper's work has even overtaken and passed in the race of popularity that wonderful production which we may consider as belonging to the previous generation—Mr. Robert Montgomery's *Omnipresence of the Deity*; a work which had already reached its eleventh edition in 1830, when Lord Macaulay endeavored to open the eyes of the public to its true value—endeavored, indeed, and with good-will, but small effect—for, in spite of the great Edinburgh reviewer, it has since passed from its eleventh to its twenty-fifth edition. In the present paper, therefore, taking warning by the failure of a greater critic, we shall not attempt to stem the tremendous current of Mr. Tupper's popularity. Indeed, Lord Macaulay was mistaken, we think, in attributing to mere puffing Mr. Robert Montgomery's vast reputation, and therefore also in imagining that the great weight of his critical authority could be sufficient to destroy the marvelous momentum of his career. There is this great distinction between literary quackery and quackery of any other kind, that its success clearly involves much more free and spontaneous liking on the

part of the public imposed on, and probably implies a less conscious *charlatanerie* on the part of the successful empiric. We feel little doubt that Mr. Tupper is a profound believer in the sterling character of his own fame, which in one of his minor productions he solemnly bequeaths to his son; we feel sure that the readers who trust in him have a genuine sense that to peruse him is comfortable to their interior mind—that they have thrown something grateful “into the system,” when they have followed him through one of his feebly fluent meditations. Whatever puffing may do for other departments of life, it is tolerably powerless to make men read what is not suited to their taste and character; and on that very account the phenomena of literary quackery are of much greater interest than those of trade quackery. Verse-reading is, after all, a work of supererogation. There is no article of luxury with regard to which the “consumer's” judgment is so likely to be really unprejudiced as books. The average man knows that he *must* buy clothing and furniture, if not cheap and of good quality, then dear and of bad quality; and his uneducated mind naturally inclines to credulity when he sees it written in large characters wherever he goes that the best quality can be secured at the lowest prices. Again, he must, if possible, be cured of his ailments; and the deceitfulness of hope will incline him to believe in these large promises of perfect and speedy cure. But books he need not buy at all; in spite of the reviewer's raptures, he probably will have strength of mind to neglect them, unless by their intrinsic qualities—whether wholesome or the reverse, he perhaps is not the best judge—they contrive to impress the minds of the class in which he moves. If Mr. Tupper did not contrive to impress his public, then, in spite of puffing, we do not think Mr. Tupper would have any public to impress; and if his reputation has been gained by an empirical dexterity instead of by true art, it makes it only the more

* *Proverbial Philosophy: a Book of Thoughts and Arguments originally treated.* By MARTIN FARQUHAR TUPPER, Esq., M.A., of Christchurch, Oxford. Second Series. Thirty-third Edition. Hatchard, 1857. *Probabilities an Aid to Faith.* Third Edition. Hatchard.

Lyrics of the Heart and Mind. By M. F. TUPPER. Hall, Virtue & Co., 1855.

Ballads for the Times. By M. F. TUPPER. A new Edition. Hall, Virtue & Co.

Memorials of W. G. Tupper. Edited by M. F. TUPPER. Bosworth.

Rides and Reveries of Æsop Smith. By M. F. TUPPER. Hurst & Blackett, 1857.

interesting to discuss the qualities by the aid of which he has contrived to fascinate his public. Instead, therefore, of storming at his reputation, or attributing it to the energies of the publishing department, we shall simply strive to understand it. His popularity is one of the most unquestionable facts of the day. As he himself remarks, with his usual depth of thought and strength of conception,

"That which is can never not have been; facts are solid as the pyramids;"

—a truth which Mrs. Gamp illustrates with less dignity but greater vivacity, where she parenthetically observes on facts "being stubborn and not easy drove." Mr. Tupper will perhaps think that in saying thus much we have already done more for his fame than any criticisms we can offer will be able to undo. As he observes of great authors—

"The honest giant careth not to be patted on the back by pigmies:

Flatter greatness, he brooketh it good-humoredly; blame him, thou tiltest at a pyramid."

But we have no more intention of tilting at our pyramidal giant than we have of "patting him on the back." We are quite aware that it would be utterly beyond our strength to displace him from his stronghold in public favor. Still, being unfortunate enough to belong to that small but respectable minority who regard Mr. Tupper's versicular philosophy as superficial and conceited twaddle—as a new manifestation to these latter days of weakness and sentimentalism under the solemn form of the Oracular—we feel only the more called upon to explain, as far as we are able, the apparent anomaly of our position. If we seem less reserved in the expression of our honest judgment on Mr. Tupper—whom we need scarcely say we know solely through his works—than is in accordance either with our custom or our taste, it must be remembered that we are not called upon to be tender in the case of one who has already received, and is still receiving, no doubt, a temporary but exceedingly substantial reward. Mr. Tupper is himself always great on the subject of "compensations." He has more than his fair share of good things—both emolument and fame. A man may easily have too much praise; or, as he

justly remarks in his own figurative phrase,

"The cordial quaffed with thirst may generate the fumes of presumption;"

and, whatever the very curious physiologico-chemical process here supposed to take place in Mr. Tupper's brain may be—which reminds us, by the way, of an elaborate process carefully described in the work of an eminent chemist for the generation of sulphuric-acid fumes in leaden chambers—we fear we can trace the finished product, the "presumption," in the latest of Mr. Tupper's works. The moral twaddle of the *Proverbial Philosophy* has certainly so fermented as to give off unmistakable "fumes of presumption" in the amazing trash called *Rides and Reveries of Aesop Smith*. There is enough of empirical dexterity in the *Proverbial Philosophy* to give us some conception of the origin of its popularity; but no public could ever have been taken in for the first time by such insufferable rubbish as has attained type under the title of the latter work. We feel no scruple or hesitation, therefore, in administering our minute dose of "compensation" for his great success, and only wish we could make it even more drastic. To assume for a moment his own pure style—we can not be sure that we hit the farmer's trot of the meter—

"Dost thou feel oppressed by the *Embonpoint* of constant popular favor?

Then go drink the Epsom salts from the cup of ungenial Criticism:

It shall make thee comparatively whole, if it be not too late for that treatment."

We have said that when we call Mr. Tupper's poems a result of literary *charlatanerie*, we do not at all mean to charge upon him any conscious intention of abusing the confidence of the public. But we mean by *quackery* any substitute for true art which, either from ignorance or any other cause, wins favor and attention by addressing itself to the superficial notions and feelings of those who are not good judges in their own case. Whenever any one appeals, consciously or unconsciously, to a class of notions and feelings that are not at the root of the matter, and thus gains popularity by falsifying the true proportions of things in the haste to be effective, we truly call him a quack. If a physician treats *symptoms* only, when he

ought to know the deeper causes of symptoms, we call him a quack. When an artist studies the picturesque at the expense of true drawing, faithful coloring, and reality of thought, we call him a quack. When a manufacturer studies to attract by show and price, rather than by the real worth of his goods, we call him a quack. And so also when a *littérateur* ministers principally to superficial or vulgar propensities, instead of attempting to rectify them by exhibiting their true relation to human nature—be it from blindness, or from haste, or from the desire to please—we call such a *littérateur* a quack. And in the characteristic features of the method by which such an empiric wins his fame, we may see reflected as in a mirror the leading deficiencies and weaknesses, or, in some cases, the vices even, of the public mind he addresses. We do not accuse Mr. Tupper, however, of making capital out of any thing worse than the defective education and consequent appetite for decidedly bad literature observable in a certain class of the English public.

It is necessary to remember, in attempting to account for the marvelous success of the *Proverbial Philosophy*, that the vastly larger part of the English reading world now consists of a class which, a few generations ago, contained no consumers of literature—scarcely even of newspaper literature—at all. It has often been hastily, but we believe erroneously, assumed, that writers so foolish as Mr. Martin Tupper and Mr. Robert Montgomery circulate entirely within the circle of imbecile “fashionable” religion. We do not believe that that world is large enough to create even a small fraction of the gigantic demand which has arisen for these gentlemen’s writings. Probably the largest audience yet commanded by any English writer has been commanded of late years by Mr. Dickens. And we think it beyond question that his audience—we mean his audience of recent years, since the establishment of *Household Words*—evinces many of the same class of deficiencies in literary taste and sentiment to which Mr. Tupper appeals. Mr. Dickens has himself told us, that his two latest and worst works—works of which few cultivated men have been able to read more than a very brief specimen—have secured a far wider popularity than any of the really great productions of his early

genius; and we shall presently find in the weakly moralities, the sentimentalism, and the extravagant coloring of the *Proverbial Philosophy*, very much to remind us of *Bleak House* and *Little Dorrit*.

The same inference may be drawn from the popularity of Mr. Gilfillan as a critic; a writer whose capacity can not be more adequately shadowed forth than by using his own words in explaining what the faculty of a certain great poet—Pope—did *not*, but what every one who knows him will admit that the faculty of Mr. Gilfillan *does* resemble, namely, “the feather of the wing of a great eagle, dipping into the night-tempest which raves around the inaccessible rock of his birth-place.” How imposing would be an edition of Martin Tupper from the pen of the Rev. George Gilfillan!

Now these defects of taste and temperament are neither inexplicable, nor even lamentable, but simply natural, in a class that has not yet had time or opportunity to learn literary discrimination—to know the difference between half truths and whole truths, or the tests which distinguish the semblance of good feelings from the reality; whereas, did they prevail in classes that have long had the advantage of real culture, they would compel us to attribute to the readers the full fatuity of the writers they admire. We think, then, that we may fairly assume, as our own experience would certainly assure us, that Mr. Robert Montgomery and Mr. Tupper find the majority of their audience in a class, not of *depraved* literary taste, but whose literary tastes of any sort are of quite recent origin. And this conviction it is which gives us some real interest in analyzing the causes of their unmerited success. To investigate the secret of that morbid stimulus which is administered to degenerated and worn-out minds, would indeed be a heartless task; but to study the weak side of the half-educated classes just emerging into the world of literary interests, is far otherwise.

We have some light on the subject from the analogous case of the first literary interests of the young, whatever be their class and education. For, the first stirrings of literary appetite, whether in individuals or classes, are never marked by strength or purity of taste. Indeed, it is not usually in any way the merit of the author which first fascinates the attention in such cases, but the degree in which

he happens to rouse and draw out into the light, as it were, those opening faculties and sentiments which have no sufficient expression in the real world. Hence this craving is at first most easily satisfied by exaggerated and false pictures of life, stimulating most strongly those awakening feelings which, real as they are, are yet but dimly understood. When, either in an individual or a class, a whole world of hitherto latent life is beginning to unfold, the first delight is in any thing, however false, exciting, or showy, that distinctly stimulates that life. In such a phase of our education, we do not care to see the true proportion, extent, and limitations of human character clearly indicated and recognized, but rather to have the new world we are beginning to see presented *strongly* to us. This is the secret of the love of *romance* quite apart from its merit, that always shows itself as the first phase of literary taste, either in the young or the half-educated. The world of romance is a world of new experience, which the novice is eager to comprehend—of strange tendencies within him, the issues of which he endeavors to anticipate by entering into the fictitious experience of others. Directly we clearly *know* that the romantic delineations of life caricature and falsify the deepest life within us, they become stale, flat, and unprofitable; but in the mean time that author will get most hold of us who fosters those elements of our nature which are as yet only in the germ. Any one who professes to unwind for us our newly-discovered clues of instinct or hope, will fascinate our attention at once; and fascinate it the more readily, perhaps, if he do not make too much appeal to the real experience of those who have already unwound them for themselves.

And hence we can not wonder that when a large and uncultivated class begins to care about religious poetry at all, it should at first be enraptured by the glaring magniloquence of such men as Mr. Robert Montgomery. It is in the very stage most adapted for the influence of an empiric, with religious sentiment just romantic enough to desire excitement, and yet inexperienced enough, both in taste and maturity of feeling, to prefer dazzling colors to clearer vision. His readers evidently cared more for new excitement of certain vague feelings than for new guidance; a sure sign of imma-

turity, nay, of that stage of immaturity in which we rather need reassurance that we have a certain class of sentiments at all than any clearer insight into them; just as the infant loves bright dancing colors which excite the eye long before it takes any interest in discriminating forms. And thus we account for the popularity of Mr. Tupper's great predecessor. The passionate, abysmal, and picturesque aspects of poetry were then in the ascendant, even in the cultivated classes, owing to the influence of Byron. Mr. Robert Montgomery introduced the same aspects of life into his so-called religious poem for the uncultivated classes; and he obtained his marvelous success merely because the people he addressed were just beginning to feel that religion had an exciting and picturesque, as well as a didactic side—that Nature ought to be grander, and human passion more terrible, if they were seen to exist, as they do exist, in the constant presence of God. They devoured Mr. Robert Montgomery's jargon about the "Omnipresence of the Deity," because it stimulated the growing feeling that the shadow of religious mysteries ought to give new magnificence to the external universe and to the inward passions of man. Gaudy metaphor, vulgar allegory, profuse personification, were the natural baits to stimulate those first floundering attempts of literary inexperience to peep into the relation of God with outward Nature and inward experience. Giddy and swimming eyes were not likely to find fault with glaring and muddy colors.

Mr. Martin Farquhar Tupper, M.A. of Christchurch, Oxford, has caught the prophetic mantle dropped by Mr. Robert Montgomery; and though the *charlatanerie* of his *Proverbial Philosophy* seems to us as conspicuous as that of *The Omnipresence of the Deity*, its general characteristics are different, and no doubt evince a certain sort of advance in the class with whom it is popular. *The Omnipresence of the Deity* was a vulgar daub, with nothing tolerable about its execution; and was acceptable only as empty political eloquence is acceptable in a time of political wrong and coming revolution—that is, as the *sign* of feelings stirring in the breasts of the multitude, not as an augury of any thing better. The style of the *Proverbial Philosophy* bears the same relation to Keble and Tennyson that the

style of the *Omnipresence of the Deity* bore to that of Byron. As the latter production gives us the quack-poet's conception of "the tremendous," so the former gives us the empiric's notion of "the inward." The one makes a wretched attempt at religious sublimities, the other at religious tenderness and profoundities. Both alike are empirics; but Mr. Tupper is the empiric of a more reflective age. Again, where Mr. Robert Montgomery was overwhelming and gigantic, Mr. Tupper is minute and microscopic, only in one or two instances accidentally soaring into immensity. He professes to verify religious and moral truth by detailed personal experience; and his observations may often tend to excite observation and reflection in those who have never thought before, and who are not too much irritated with the pompous truisms and strained imagery of the man. That the book should have been written by a Master of Arts of Oxford is simply a new testimony how very little power education has to eradicate obstinate conceit, to prune empty metaphor, and to shame windy rhetoric, in a mind constitutionally prolific of these tendencies. But, nevertheless, we do not doubt that the book may have a useful function to those who have reached only a certain very early stage of self-conscious life. Indeed, we are convinced that for one short transition period, when either individuals or classes are passing from an unreflective to a reflective view of the world around them, what would otherwise be very unhealthy, and what is very superficial, trash, may discharge for a short time a very healthy and natural function. It requires a work of real genius to be *permanently* popular with any class of society whatever. But a mind of no genius at all, a mere charlatan writer, may often hit the humor of the moment, and assist a moral transition which the greatest genius, from the very thoroughness of its intellectual work, may be unable to help.

This is the case with Mr. Tupper. He fills his writings with what, to his own class, are the baldest truisms; and spoils even these by adding a pompous and vulgar fringe of artificial simile. But his truisms are not always truisms to his readers; and his atrocious taste in ornament is not perceived. As we said, he is a quack of the "inward" school. He is the victim of his own thronging fancies. He is a

kind of poetical Pecksniff; and takes for his motto: "My friends, let us be moral." But a simple man is easily taken in; and Mr. Tupper's readers, finding now and then themes for their own thought, are blind to the ostentatious tediousness with which he dilates them. He is a sort of homeopathic metaphysician, and only makes his little modicum of truism visible at all by the immense proportion of sugary simile in which he wraps it up. He has the art of "pondering" *in vacuo*, without giving you any idea what he is pondering about. Mr. Robert Montgomery rejoiced in strong assertion; he delighted, for example, to inform Death, in his mighty trumpet-tones, what was the effect on the world at large of his (Death's) birth:

"O Death! thou dreadless vanquisher of Earth!
The elements shrank blasted at thy birth,"
etc.

But Mr. Tupper's line is very different. He is feebly interrogative, and almost always suggests a plurality of equally indefinite answers, contriving to prove nothing except that he is not thinking about his question at all further than as an excuse for literary dawdling:

"O Death! what art thou? Antitype of Nature's marvels;
The seed and dormant chrysalis bursting into energy and glory:
The calm safe anchorage for the shattered hulls of men;
The spot of gelid shade after the hot-breathed dust," etc.

Mr. Tupper is a sort of stage-anchorite. He is always hushing us, and whispering how good it is to live in a spiritual hermitage, and be visited by blessed gleams of tranquil wisdom. His hospitality, however, is oppressive:

"Come into my cool dim grotto, that is watered
by the rivulet of truth,
And over whose time-stained walls climb the
fairy flowers of content:
Here, upon this mossy bank of leisure, fling
thy load of cares;
Taste my simple store, and rest one soothing
hour."

The invitation itself, and the "simple store" of Truism, remind us irresistibly of Mr. Pecksniff's similar invitation: "Let us make merry, my friends," said Mr. Pecksniff; "and he took a captain's biseuit."

But it is time to sketch generally the characteristics of the *Proverbial Philosophy* in their relation to the wants of the class with which it has found favor. We believe that if we are to mean by a charlatan one who gives a spurious and surface answer to a real want—without reference, of course, to the motive or sincerity of the giver—we could not find a much purer specimen of charlatan religious poetry than the work we are reviewing. It may benefit, perhaps has benefited, the class by whom it is devoured, as it benefits a lad to pass through the belief in Rhetoric and find it empty, or to plunge into the Lalla-Rookh stage of sentiment and find it unwholesome; but it will certainly have benefited its readers most when they have outgrown it. Let us consider, then, the various aspects of Mr. Tupper's poetic wisdom. Moral and religious poetry of the meditative sort is clearly his aim; so that we may assume that it should reflect, after some meditative fashion, the moral and religious life of the day. And this is what he proposed to himself:

"Thoughts that have tarried in my mind, and
peopled its inner chambers,
The sober children of reason, or desultory
train of fancy;
Clear running wine of conviction with the
scum and the lees of speculation;
Corn from the sheaves of science, with stubble
from mine own garner;
Searchings after Truth, that have tracked her
secret lodes,
And come up again to the surface-world with
a knowledge grounded deeper;
Arguments of high scope, that have soared
to the keystone of Heaven,
And thence have swooped to their certain
mark as the falcon to its quarry;
The fruits I have gathered of prudence, the
ripened harvest of my musings,
These commend I unto thee, O docile scholar
of Wisdom!
These give I to thy gentle hand, thou lover
of the right."

Mr. Tupper, then, will be a poetic philosopher; thoughts and fancies, and convictions and speculations, and high arguments and the results of experience, are to be poured out by him, and welcomed by the "scholar of wisdom" and by the "lover of the right." We find him, however, a living impersonation of the "oracular." His thought, while it follows the fashion of the day by directing the mind inwards, and dives with remarkable pertinacity for what he calls

"The chance pearls flung among the rocks by
the sullen waters of Oblivion,"

seems to us to succeed only in bringing up the empty-shell truisms instead; with which, however, he fearlessly proceeds to build the "cool dim grotto" that has extracted so successful a tribute from an enthusiastic public. His philosophy consists in personifying states of mind by abstract names; writing them with capital letters, and parading the shroud of mystery in which he finds them. His poetry is only a beading-over of all he has to say with artificial similitudes or metaphors; his sentiment is a trickling stream of sentimentality; and finally, the self-respect of true genius is parodied by a pervading air of puffy self-sufficiency, which grates on the religious themes, and gives to the work what we have termed its silly oracular tone.

First, as to Mr. Tupper's "words of wisdom," as he himself describes them. They gain their popularity by directing the reader with much solemnity to look inwards, as the temper of the age requires; then giving all the splash and excitement of a very deep spiritual dive, while really you only go under enough to confuse the eyesight; and finally coming up triumphant with a very big and empty truism, which every body recognizes as true, and which those who are taken in by Mr. Tupper give themselves a good deal of credit for recognizing to be true, and verifying from their own experience, after all the "laborious musing" by which it has been ushered in. "Here is a man," the reader thinks, "who clearly goes down into the depths of self-knowledge; and I find it quite easy to go with him, and recognize my own former thoughts again in his rich language; so that he must be teaching me to know myself." For example, we open our library copy of Mr. Tupper, and find many passages marked by an enthusiastic disciple. Amongst them is this:

"Content is the true riches, for without it there
is no satisfying;
But a ravenous all-devouring hunger gnaweth
the vitals of the soul."

Had this stood alone, we doubt if it would have excited much enthusiasm. We have, we believe, met with the sentiment occasionally in copy-books. But let us consider the setting. It comes in the middle of certain musings "Of Wealth," which

begin with the following fragmentary allegory:

"Prodigality hath a sister Meanness, his fixed antagonist heart-fellow,
Who often outliveth the short career of the brother she despiseth:
She hath lean lips and a sharp look, and her eyes are red and hungry;
But he sloucheth in his gait, and his mouth speaketh loosely and maudlin:
'Let a spendthrift grow to be old, he will set his heart on saving,' etc.

Further, the essay goes on to inform us that Wisdom says, "Give me enough," and that "stout-hearted Independence" adds, "and that by the sweat of my brow." After this brief interchange of ideas between two of the Virtues on the subject of a livelihood, Mr. Tupper, in his own person apparently, puts in for "enough and not less, for want is leagued with the tempter;" and also for "enough and not more, saving for the children of distress." This explicit request for neither more nor less than enough is then followed by a frank avowal of a leaning to the side of want, if the exact mean can not be attained; and after some illustration of this position by reference to the advantage of the Polar summer over the "burnt breasts of the torrid zone," which "yield never kindly nourishment," a very tremendous passage comes. It consists of a description of the great banian-tree near Benares, in itself a forest, with fresh sprouts straining to the earth; we are introduced to a dancing dervish, a self-torturing fakir, a "calm" Brahmin worshipping a bull, some jackals, and a boa watching them as it hangs from a bough—all in this banian forest:

"In the plains of Benares is there found a root that fathereth a forest,
Where round the parent banian-tree drop its living scions;
Thirstily they strain to the earth like stalactites in a grotto,
And strike broad roots and branch again, lengthening their cool arcades:
And the dervish madly danceth there, and the fakir is torturing his flesh,
And the calm Bramin worshipeth the sleek and pampered bull;
At the base, lean jackals coil, while from above depending,
With dull malignant stare, watcheth the branch-like boa."

We are beginning to get quite interested in Oriental life, though at the same time

rather bewildered how we are to get out of the wood, when suddenly we arrive at the moral interpretation:

"Even so, in man's heart is a sin that is the root of all evil,*
Whose fibers strangle the affections, whose branches overgrow the mind;
And oftenest beneath its shadow thou shalt meet distorted piety—†
The clenched and rigid fist, with eyes upturned to heaven,
Fanatic zeal with miserly severity, a mixture of gain with godliness,‡
And him against whom passion hath no power, worshipping a golden calf:§
The hungry hounds of extortion|| are there, the bond, the mortgage, and the writ.¶
While the appetite for gold, unslumbering,** watcheth to glut its maw;
And the heart so tenanted and shaded is cold to all things else,
It seeth not the sunshine of heaven, nor is warmed by the light of charity."

Now, we can not wonder that, after all this excitement under the banian-tree, any simple-hearted reader was glad to get back to the tranquillizing assertion that "content is the true riches." To emerge from that cold shade and meet a familiar old face like that, was certainly an occasion for thankfulness. Is this what Mr. Tupper meant when he promised us

"Searchings after Truth, that have tracked her secret lodes,
And come up again to the surface-world with a knowledge grounded deeper?"

That he has come up again to the surface-world, we saw with pleasure by that useful copy-book truth; but were there any "secret lodes of truth" among that "happy family" under the banian-tree? We don't seem to ourselves to grasp the meaning of "content is the true riches" any better after thinking of the dancing

* Another allusion to the copy-book.

† The dancing dervish, of course.

‡ The fakir?—without the torture, however, and with "gain."

§ The calm Brahmin, clearly; but we thought it was a real bull he worshiped, not a golden calf.

|| Legal jackals, no doubt.

¶ These do not appear in the fable at all, unless they too are the jackals, and are meant to explain and stand in apposition to "the hungry hounds of extortion," on the principle of the "sword" standing for the soldier.

** The boa, apparently, but we thought its appetite was for jackals, that is, hounds of extortion, not for gold.

dervish, and the fanatic faquir, and the calm Bramin, and the bull, and the lean jackals, and the pendent boa. Rather does it suggest to us how many situations there are in life where the "true riches" of content are absolutely unattainable. Had any one of the pleasing individuals described any reason at all for content except the boa, which held the whole game in its hands? Seriously, the whole passage is a very good illustration of Mr. Tupper's mode of enunciating "words of wisdom." The words of wisdom themselves are trite truisms. For instance, here he has a vision that "avarice is the root of all evil." The word root suggests roots, and roots the banian-tree, which runs to root. Mr. Tupper, then, considers that the tangle in the heart caused by this root may be effectively illustrated. He reads up his Oriental life, and thrusts it under the banian-tree; but needing a reference to Avarice every where, he presses the poor dervish into the service, and assures us that "oftenest beneath its shadow thou shalt meet distorted piety:" surely a questionable psychological fact. Are mad dervishes and faquirs usually avaricious? As far as we remember, most of the old eremites gave away such property as they had before they took to their cave, or their pillar, or their desert. The truth is, that the whole scene was dragged in by the roots of the banian-tree, and can not fairly be said to have familiarized us with our truism, though it may render us very thankful to get safe back to it. Yet such is the origin of Mr. Tupper's reputation for wisdom. His readers lose their way utterly while he is tracking "Truth's secret lodes," but become subdued by the pageantry; and when they get cheerfully back to the aphorisms of their infant days, they are quite willing to take it for granted that they have come up "to the surface-world with a knowledge grounded deeper."

But Mr. Tupper does not always return again out of his devious similitudes bringing his text with him. Where his text is a good strong serviceable truism, like that we have quoted, it defies even the metaphorical shade of a banian forest, and reappears triumphant. But where, as is only occasionally the case, it is less a truism than a truth, nothing can save it; it perishes miserably under the process of illustration. In fact, Mr. Tupper ought to stick to truisms far too plain to need

illustration—truisms with a homely vigorous personality, that can't be disguised, do what you will; and then he can lay on the pomp as thickly as he likes, without fear of losing his hold of it. But go through the same arduous process with a truth, and it can't easily survive. If it be a *sine qua non* that it shall be liable to frequent metempsychosis, and be put through from ten to twenty different forms of metaphorical life in almost as many lines, nothing can save its identity from eventual destruction. A truism stares vacantly and good-humoredly through every disguise; and when a little confused, you are reminded of it by the mere title at the top of the page. But a truth, an idea, has an individual shape and aspect of its own, which no one phrase suggests; and this sort of thing is quite unfitted for Mr. Tupper's purpose. Sometimes he starts with one; but it never survives the sixth metaphor, and becomes a shapeless thing, neither truth nor truism, before the end. For example, in an Oracle that promised fair to be true and even significant in the outset, "Of Searching for Pride,"* Mr. Tupper clearly wished to say, and does manage to say, that it is hopeless to eradicate pride by subtle self-examination; that it only melts away before a vision of higher perfection; that you should look above yourself, not into yourself, to get rid of it:

"Pride is a double traitor, and betrayeth itself
to entrap thee,
Making thee vain of thy self-knowledge, proud
of thy discoveries of pride."

This is true and wise; but not only does he say this in very lengthy and grandiloquent metaphor, requesting the emmet to look up at the eagle in order to become aware of its own insignificance, begging his reader to beware "that thine aim reacheth to higher than thyself," and that the "standard of thy soul wave from the loftiest battlement"—whatever that may mean; but having completely exhausted the thought, he launches out into general nonsense, stating that pride is a "pestilent meteor flitting over marshes of corruption," a "gloomy bow arching the infernal firmament and leading to the dwelling of despair." Soon after it is a "lion-ant, watching in the bottom of its toils." You are then told to fight against it in

* In the new edition headed merely, "Of Pride."

the "panoply of prayer." The lesson originally intended is then reversed. It having struck Mr. Tupper that pride might be likened to Proteus, and to a mandrake, you are accordingly told to pray for the means of directly detecting and binding pride in his many Proteus-shapes, instead of for a vision of good which will make you humble; and the final exhortation utterly inverts the idea with which the piece began, telling you to do what you were told before it was useless to attempt:

"Root up the mandrake from thy heart, though
it cost thee blood and groans,
Or the cherished garden of thy graces will
fade and perish utterly."

Again, there is no one so flatulently "many-sided" in his way as the lover of truisms, as every one may know by consulting the sage before us. It is only the man who grasps a single aspect of truth with intense vividness and tenacity who can not always walk round it. The genuine proser grasps no aspect of truth with vividness at all. He has an aphorism for every side of practical wisdom, but no sort of principle by which to harmonize the opposite maxims. The vast importance of trifles, and the great folly of sacrificing great to petty interests—the danger of haste, and the danger of procrastination—has each its proverb; and, for the same reason, no creature is more many-sided, in a shapeless way, than the didactic school-girl with her newly gathered store of hollow universal wisdom. In this sense Mr. Tupper is many-sided; every side of the "received text" that concerns the moralities with which he deals has a word or two of flat appreciation; and he satisfies, therefore, after his empiric fashion, the craving of the age for a "round" man. He regards it as his mission, as most such Dodona-oracles do, to have a great deal of irrelevant wisdom for the least important side of matter. This is the constitutional weakness of oracles; they like to take credit for bringing forward the unnoticed aspect of a question—that there is a dark side to the moon, or a dull back to a mirror—no matter whether that aspect be unnoticed because it is quite unnoticeable, or because it has escaped notice. Mr. Tupper, being a "round" man, illustrates this tendency. He is great on "truth in things false," "hidden uses," "compensations," "indirect

influences," deceptive forms of various virtues, such as humility, honesty, zeal; on delusive estimates of character; on "good in things evil;" on the hidden influence of names; and so forth. Mr. Tupper, indeed, sometimes forgets the soundness of a proverbial philosopher in his anxiety to make the most of the *deep* or hidden side of a thing; for example, when he tells us the following curious psychological fact:

"A mean spirit boweth down the back, and the
bowing fostereth meanness;
A resolute purpose knitteth the knees, and
the firm tread nourisheth decision;
Love looketh softly from the eye, and kindleth
love by looking;
Hate furroweth the brow, and a man may
frown till he hateth:
For mind and body, spirit and matter, have
reciprocities of power,
And each keepeth up the strife; a man's
works make or mar him."

But in general we don't at all accuse Mr. Tupper of committing himself to decidedly eccentric views for the sake of originality. He wisely considers that much more interest is felt in contemplating an old friend in new costumes than in seeing new dresses on new wearers, since the pleasure of a metamorphose is added to the pleasure of a novelty. For example, we will give a brief summary of the dissertation headed "Of estimating Character." Mr. Tupper begins by asserting that man very often judges rashly because he can't see motives, and that we are not much wiser than in the old days when guilt was tried by ordeal. We are not to judge by the result, as we generally do. Here a picture is drawn of a guilty lady of rank, whom the world esteems excellent, and an unfortunate but scarcely sinful penitent, whom it casts out as infamous. Again, the person who succeeds in money-speculations is flattered by the world, and he who loses by them is censured. Here another contrast is drawn between a second nearly innocent person, who steals bread for a starving family, and the hardened rich men who refuse their help; and between a third nearly innocent person, who kills an enemy under great provocation, and the "spiteful life-long" enemy whom he kills. The objection is then stated that the good are absolutely divided—divided by an eternal gulf—from the bad. Mr. Tupper admits it, but denies our power of seeing, much less of foreseeing, where the line is to be

drawn in the present world. You may distinguish ships with the "great king's pennant" from those with the "pirate's black flag;" but a good many don't hang out flags at all, for example, yachts, fishing-boats, canoes, and gondolas. The church is to take tithe of every kind of man—the "turbaned Damascene" and his "tattooed New-Zealand brother," "the slim bather in the Ganges," "the sturdy Russian boor," the "sluggish inmate of a Polar cave," "the fire-souled daughter of Brazil," "the embruted slave from Cuba," and "the Briton of gentle birth. Mr. Tupper then gives instances of gross miscalculations as to the moral future of a man, in the case of a "nobly-erring spirit" and a "hard-visaged man unlovely in thy strictness." He remarks how difficult it is to judge. Sometimes you judge rightly at a glance; sometimes you judge wrongly at first sight, because you catch a good man at his worst, or a bad man at his best. He then notices the difficulty of judging by mere face and mien, culture having often done so much to enrich the minds of men of dull appearance, and so little in other cases to develop natural genius; yet, on the whole, he says, you may venture to judge from the general physique—indeed, the physique reacts upon the mien; and here, in the enthusiasm of reporting a neglected truth, occurs the eccentric little theory we have quoted, that a habit of stooping will make a man mean, and a habit of frowning will make him a hater. He then states, in conclusion, that there be "deeper things than these lying in the twilight of truth;" and expresses his conviction, that if we could see into all the antecedents of all men, "the myriad little matters that none but Omniscience could know, and accidents that steer the thoughts where none but ubiquity can trace them," we should then

"See as He seeth who judgeth all men equal—
Equal touching innocence and guilt; and different alone in this,
That one acknowledgeth the guilt, and looketh
to his God for mercy;
Another boasteth of his good, and calleth on
his God for justice:
So he that sendeth none away is largely munificent to prayer,
But in the heart of presumption sheatheth
the sword of vengeance."

Now we have literally given every ves-

tige of a thought we could find in this dissertation; and it is about the best, or least absurd, we could find. Many-sidedness of this sort is certainly not instructive. In a sense, no doubt, you go all round the question; but you see nothing on any side. You look at character from the present; you look at many fallacious views of it; then you look at the same fallacious views of it taken from the past; you judge it by first impressions; you judge it by second impressions; you judge of it by mental indications; you judge of it by physical indications; you judge of it from an equality; and, finally, you judge of it from above; and from all views you gather nothing, except that it's very hard for man to judge of it at all, and that if you be skillful and fortunate you may make out something. It's like Mr. Pecksniff's architectural views of Salisbury Cathedral. Indeed, Mr. Tupper does remind us constantly of Mr. Pecksniff's oracular forms of thought: "Salisbury Cathedral from the north, from the south, from the east, from the west, from the south-east, from the north-west." If any one thinks that we do Mr. Tupper injustice by separating his thoughts from their framework, we can only say that we are unconscious of the injustice. Bald truisms are bad enough, but they are much worse when their baldness is profusely garlanded with staring artificial flowers.

Looked at as embodying a philosophy, the charm of Mr. Tupper's work for raw thinkers probably lies in two peculiarities: it indulges profusely in abstractions; but almost always tacks on to the abstraction some definite physical image, so that the vague idea has a bright distinguishing pennant attached to it. Both these practices of Mr. Tupper are really effective fascinations in their way. Immature thinkers like to have abstract ideas introduced to them, provided there is a sufficiently lively illustration attached. Whether the illustration is apposite or not, they regard less. To encounter a new abstraction is to a beginner like making a new conquest; and, provided his imagination be called to the help of his understanding, it is a pleasant conquest. A great many people, we take it, would think they had mastered a grand notion when they read in Mr. Tupper that they are daily in danger of sinking

"Beneath the waters of the Actual;"

that it ought to be their abhorrence

"To strip from Life its charitable garment of
Idea;"

or that—

"The delicate tissues of Event are woven by
the fingers of Ubiquity."

In the first place, this confronting "the Actual," "Idea," "Event," and "Ubiquity," as real things capable of exercising a characteristic influence of their own, startles them. It has probably not occurred to them before to consider that every thing which happens constitutes a distinct class by reason of the common attribute of happening; and to consider this large class, not only as existing, but as putting forth a sort of individual influence, under the name of "the Actual," or "Event," is an intellectual surprise. But that surprise would not long be agreeable if the distinguishing pennant of a metaphor were not attached to vivify these vague notions. Readers who would certainly confront the mere idea of an oppressive Actuality without any emotion, attach a very lively interest to the suggestion that they are to "sink beneath the waters of the Actual;" and thus they connect the passage with the sense not only of a new though vague impression on their understanding, but of a distinct and graphic picture on their imagination. Whether the picture and the intellectual impression are in harmony or otherwise, matters comparatively little. Few readers of this class will pause to ask themselves, for instance: "If 'Idea' be the charitable garment of Life, what ought naked Life without that eleemosynary clothing to mean? Could there be such a thing as Life divested of Idea? Or does Mr. Tupper perhaps mean that we ought not to strip the better sort of Ideal clothing away from Life, and leave it only with the worse?" Such questions as these, we say, few who take the trouble to read Mr. Tupper at all would take the trouble to ask. They would simply feel in a confused way that new abstract notions had been presented to their minds; and that, as in the case of a picture-alphabet, they had found the tedium of the process removed by the pictorial interest of irrelevant illustrations.

We scarcely know whether to give the preference to the *charlatanerie* manifest in the abstract or concrete side of Mr. Tupper's philosophy. His love of abstract terms is puerile in the extreme; his metaphysics, where he is so unwise as to introduce any, are silly; but his choice of concrete imagery is on the whole the silliest element in a very silly work. Why Mr. Tupper has indulged himself in so lavish a use of abstract terms and personifications we do not know, unless it be to give a semi-philosophical air to his proverbial lore. Wisdom is personified in the Book of Proverbs; but every faculty of mind, and every mental quality, and most general notions, are either personified and turned into agencies, or symbolically transformed into things, in this book. Diligence, for example, (who one would think had no special bias of his own, and might be an instrument as easily of any passion or tendency as of Wisdom,) is stated at the opening of the first dissertation to be passionately devoted to diving for the pearls of Wisdom in the sullen waters of Oblivion; but instead of forgetting himself, as one would expect, after this Lethean bathing, he dutifully proceeds to string them around the "neck of Memory." This is a mere specimen of the foolish sort of abstractions made in almost every page. A person with the silken clue of wisdom is stated in the next page to be equal to threading every labyrinth of life: moreover,

"The rampant Minotaur of ignorance shall
perish at thy coming,
And thine enfranchised fellows hail thy white
victorious sails."

We will not say that ignorance is too negative a condition of mind for any personification. Ignorance was personified by Bunyan as "a brisk lad that came out of the Country of Conceit;" to turn him into a devouring Minotaur was reserved for the genius of Mr. Tupper. Elsewhere we are told that "Power hath ordained nothing which Economy saw not needful." Mr. Tupper might as well personify Management as Economy; but it would not have sounded grand enough to say that God made nothing for which he had not found a use. It would be an endless task to illustrate this monomania for abstraction. Prudence keeps Honesty in a leash. Taste has "airy speed and wily doublings." "Freedom is father of the honest, and

sturdy Independence is his brother;" and "these three," (the Honest, his Father Freedom, and his Uncle Independence, we suppose,) "with heart and hand dwell together in unity." Elsewhere we are told, in the course of the same dissertation, of the honest man, that "Freedom gloweth in his eyes, and Nobleness of Nature at his heart, and Independence took a crown and fixed it on his head." So strange is Mr. Tupper's mixture of abstract metaphors, that Freedom and Nobleness have here melted into mere qualities of mind, while Uncle Independence takes an active part in the coronation. It may seem unjust to take these foolish abstractions out of their context; but our readers may easily satisfy themselves that in their context they are quite as meaningless and abrupt as they are here. Nothing leads up to them. Nothing follows them. We are expected to be interested in the mere statement, for instance, that Prodigality hath a sister Meanness, who "often" outliveth him; that she has lean lips and red eyes, and he a slouching gait and maudlin speech; there they are left, and we hear no more of them.

If there be any thing more curious than Mr. Tupper's love of abstractions, it is perhaps his occasional metaphysics. For instance, he is great on the universal triunity, not only in every individual thing, but in "things" as such. The "idea" of a "thing," he says, is its soul; the "name" of the thing is its "mind;" and the "matter" of a thing is its "body."

"Compacted three in one, as all things else within the universe,
Nothing canst thou add to them, and nothing take away;
for all have these proportions—
The thought, the word, the form combining in the thing,
All separate, yet harmonizing well, and mingled each with other;
One whole in several parts, yet each part spreading to a whole."

That Names combine with Thoughts in Things, is an assertion novel, we take it, to Nominalists and Realists alike. How do they accomplish that very difficult feat? We can conceive that Mr. Tupper's name may in some sense have influenced his mind, and been thus absorbed into his constitution; but admitting that the name is essential to the continuity of his personal essence, we are puzzled to know how the same process takes place for inanimate objects; and also, if it be so, from which

of the many languages of earth the name that is to be part of the inseparable trinity of their being is to be selected.

We are weary of Mr. Tupper; and may pass very briefly over those aspects of his *Proverbial Philosophy* which gain for it the name of Poetry—the spurious imagination, and the spurious sentiment; as both of these, especially the former, have been incidentally illustrated in the course of what we have already said. Mr. Tupper's imagination is, we need not say, at once false and tumid. It is false; for in straining after an illustration for single aspects of things, he keeps the essence of his subject so little in his mind, that the only use of such fancy as he has appears to be to prevent the reader from thinking of his theme by the constant grating of false imagery. He wishes to say that ordinary men are limited to the life of sense; and he states that "the palings of the park of sense intrall the captured roebuck." In another passage, "universal man" is rescued by "love" from the "hell-hounds of his doings." In a third place, the soul is

"A bison in the prairie,
Hunted by those trooping wolves the many sinful yesterdays."

In all these, as in hundreds of other similar and quite equally absurd passages, an impressive moral lesson is, we presume, intended; while the obvious ideas suggested are—whether or not a roebuck can take a paling—whether "universal man" can run at all; and if so, whether as fast or faster than his own "doings"—and whether a soul could ever be overtaken by a number of yesterdays; if so, which of them would arrive first. If this be Mr. Tupper's fancy, what he means for imagination is more absurd still. We conclude the following is intended to be overwhelming:

"THE DREAM OF AMBITION."

"I left the happy fields that smile around the village of Content,
And sought with wayward feet the torrid desert of Ambition.
Long time, parched and weary, I traveled that burning sand,
And the hooded basilisk and adder were strewed in my way for palms;
Black scorpions thronged me round, with sharp uplifted stings,
Seeming to mock me as I ran; (then I guessed it was a dream—

But life is oft so like a dream, we know not
where we are.)

So I toiled on, doubting in myself, up a steep
gravel cliff,

Whose yellow summit shot up far into the
brazen sky;

And quickly I was wafted to the top, as upon
unseen wings

Carrying me upward like a leaf: (then I thought
it was a dream—

Yet life is oft so like a dream, we know not
where we are.)

So I stood on the mountain, and behold! before
me a giant pyramid,

And I clomb with eager haste its high and diffi-
cult steps;

For I longed, like another Belus, to mount up,
yea to heaven,

Nor sought I rest until my feet had spurned
the crest of earth.

"Then I sat on my granite throne under the
burning sun,

And the world lay smiling beneath me, but I
was wrapt in flames;

(And I hoped, in glimmering consciousness, that
all this torture was a dream—

Yet life is oft so like a dream, we know not
where we are.)

And anon, as I sat scorching, the pyramid
shuddered to its root,

And I felt the quarried mass leap from its sand
foundations:

Awhile it tottered and tilted, as raised by in-
visible levers—

(And now my reason spake with me; I knew
it was a dream:

Yet I hushed that whisper into silence, for I
hoped to learn of wisdom,

By tracking up my truant thoughts, whereunto
they might lead.)

And suddenly, as rolling upon wheels, adown
the cliff it rushed,

And I thought, in my hot brain, of the Musco-
vites' icy slope;

A thousand yards in a moment we plowed
the sandy seas,

And crushed those happy fields, and that smil-
ing village,

And onward, as a living thing, still rushed my
mighty throne,

Thundering along, and pounding, as it went,
the millions in my way:

Before me all was life, and joy, and full-blown
summer;

Behind me death and woe, the desert and
simoom.

Then I wept and shrieked aloud, for pity and
for fear;

But might not stop, for, comet-like, flew on the
maddened mass

Over the crashing cities, and falling obelisks
and towers,

And columns, razed as by a scythe, and high
domes, shivered as an egg-shell,

And deep embattled ranks, and women, crowded
in the streets,

And children, kneeling as for mercy, and all I
had ever loved,

Yea, over all, mine awful throne rushed on with
seeming instinct—

And over the crackling forests, and over the
rugged beach,

And on with a terrible hiss through the foam-
ing wild Atlantic

That roared around me as I sat, but could not
quench my spirit—

Still on, through startled solitudes we shattered
the pavement of the sea,

Down, down, to that central vault, the bolted
doors of hell;

And these, with horrid shock, my huge throne
battered in,

And on to the deepest deep, where the fierce
flames were hottest,

Blazing tenfold as conquering furiously the seas
that rushed in with me—

And there I stopped: and a fearful voice shouted
in mine ear,

"Behold the home of Discontent; behold the
rest of Ambition!"

It was certainly an unpleasant dream, but scarcely worth the telling. We don't at all know what the mountain symbolizes, or what the pyramid at the top symbolizes; but the Excelsior feeling which urged Mr. Tupper to ascend was creditable to him, especially amidst so many difficulties; and it was his misfortune, not his fault, that the pyramid subsequently took so unusual and unpleasant a course. That must be a very bad parable of the evil of ambition which represents a man as sitting quiet and terrified while a hot pyramid runs away with him to hell, destroying the "Village of Content" in its way. Mr. Tupper's fancy is not a little deranged, but his imagination foams at the mouth.

We can only add a word or two as to the spurious sentiment which probably imposes on many of Mr. Tupper's audience. We have said that it not unfrequently reminds us of the worst tone of Mr. Dickens's worst works. What we mean is, a tendency to draw pictures of sweet and lovely or blighted beings, on purpose to love and weep over; to draw a picture, not because it is real, or engraved on the imagination, but because the emotions want an occasion for becoming sickly and relaxed. Mr. Dickens has got into the bad habit, in his later works, of creating a special lay-figure for this sort of unpleasant and unmanly sentiment. The same element runs through Mr. Tupper. He is fond of his own emotions. Take, for instance, the following passage,

which begins a dissertation on "Life," which will illustrate what we mean :

" OF LIFE.

" A child was playing in a garden, a merry little child,
Bounding with triumphant health, and full of happy fancies;
His kite was floating in the sunshine—but he tied the string to a twig,
And ran among the roses to catch a new-born butterfly;
His horn-book lay upon a bank, but the pretty truant hid it,
Buried up in gathered grass, and moss, and sweet wild-thyme;
He launched a paper boat upon the fountain, then wayward turned aside,
To twine some fragrant jessamines about the dripping marble:
So, in various pastime shadowing the schemes of manhood.
That curly-headed boy consumed the golden hours:
And I blessed his glowing face, envying the merry little child,
As he shouted with the ecstasy of being, clapping his hands for joyfulness:
For I said, Surely, O Life! thy name is happiness and hope,
Thy days are bright, thy flowers are sweet, and pleasure the condition of thy gift.

" A youth was walking in the moonlight, walking not alone,
For a fair and gentle maid leant on his trembling arm:
Their whispering was still of beauty, and the light of love was in their eyes,
Their twin young hearts had not a thought unwowed to love and beauty," etc.

This sort of stuff is forever recurring in Mr. Tupper. Not merely emotional weakness, but a pride in it, is too common. Literary men are obliged, we suppose, to think nowadays for the express purpose of writing; but to manufacture maudlin states of the affections, in order that you may be able to turn them afterwards into type, is to carry the slavery too far. That a half-educated class should devour this sort of sentiment with something like eagerness, we do not wonder. Nothing is less easy than for an unpracticed reader and thinker to distinguish false from true sentiment, especially in writers of a somewhat different grade.

We may state, before we take leave of Mr. Tupper, that he evidently believes himself to be in a manner helpless in the hands of his Muse. In one place he tells us—

" Many thoughts, many thoughts; who can catch them all?
The best are ever swiftest-winged, the duller lag behind;
For behold, in these vast themes my mind is as a forest in the West,
And flocking pigeons come in clouds and bend the groaning branches."

And elsewhere :

" Enough! the theme is vast; sere me these necks of hydra.
Who shall drive away the thoughts flocking to this carcass?"

And in his introduction to the second series :

" Still there is an insect swarm, the buzzing cloud of imagery
Mote-like steaming on my sight, and thronging my reluctant mind."

And the same tone not only pervades all his writings, but he arrogates to himself even the elevated aims of a prophet in his last appeal to his critics :

" Friend and scholar, lover of the right, mine equal kind companion—
I prize indeed thy favor, and these sympathies are dear:
Still, if thy heart be little with me, wot thou well, my brother,
I canvass not the smiles of praise, nor dread the frowns of censure.
Through many themes in many thoughts, have we held sweet converse;
But God alone be praised for mind! He only is sufficient.
And every thought in every theme by prayer had been established:
Who then should fear the face of man, when God hath answered prayer?
I speak it not in arrogance of heart, but humbly as of justice;
I think it not in vanity of soul, but tenderly, for gratitude—
God hath blest my mind, and taught it many truths:
And I have echoed some to thee, in weakness, yet sincerely:
Yea, though ignorance and error shall have marred those lessons of His teaching,
I stand in mine own Master's praise, or fall to his reproof.
If thou lovest, help me with thy blessing; if otherwise, mine shall be for thee:
If thou approvest, heed my words; if otherwise, in kindness be my teacher.
Many mingled thoughts for self have warped my better aim;
Many motives tempted still, to toil for pride or praise:

Alas ! I have loved pride and praise, like others
 worse or worthier ;
 But hate and fear them now, as snakes that
 fastened on my hand :
 Scævola burnt both hand and crime ; but Paul
 flung the viper on the fire :
 He shook it off, and felt no harm : so be it ! I
 renounce them.
 Rebuke then, if thou wilt rebuke, but neither
 hastily nor harshly ;
 Or, if thou wilt commend, be it honestly, of
 right : I work for God and good."

This is strong and even solemn language ; and there are few, we trust, who would not shrink from the assertion that it is the language of conscious cant. But however high the aims of a writer may be in the moments of his sincerest purpose, we can not consent to abdicate, in deference to any self-assertion of this sort, our right to try, not only the literary capacity, but, so far as may be, the spirit and the moral caliber of the finished result, by the best criterion we have. However eagerly, then, Mr. Tupper may at times desire "to work for God and good;" however sanguine he may at times feel that he *has* worked for ends so sublime; however clearly we may recognize the fact, that the mere feebleness of a man's intellectual nature will often give to his work a character and tone that in a *clearer-headed* writer would be truly construed as cant—we still do not hesitate to say that we have not recognized in any work of the present day more abundant indications of human vanity than in Mr. Tupper's *Proverbial Philosophy*. A man even of feeble intellect, who works constantly "for God and good," will not waste nine tenths of his space on the most flaring and frivolous ornamentation, or,

indeed, on any mere ornamentation. He will not devote pages to the enumeration of the various metaphors by which the "Words of Wisdom" may be typified. He will not treat universal human passions, the force of which he personally knows, in language as stilted and unreal as that in which he writes of heavenly joys. He would at least be simple and vehement where he finds himself within the limits of his own experience, however grand the dimensions to which his words may swell in the rarefied atmosphere of imaginary worlds. Mr. Tupper is never simple, and never eager. With pompous and patronizing airs that never leave him, he defends the virtues and attacks the sins; he panegyricizes prayer in conceited raptures, and seems to pique himself on being uniformly complimentary to his God. We will not deny that he generally believes himself to "work for God and good;" but we are quite sure he generally does so in just the same tone of mind in which he writes "staves" on behalf of the Manchester *Athenæum*. There is no indication in his books that he has ever in writing them torn away from his heart the veil of sickly literary trifling, to gaze directly on the realities of human life. A writer who dedicates his energies to festooning the virtues with vulgar artificial flowers, and making religion look ridiculous by the tawdry "fillagree of fancy," as he terms it, in which he smothers faith, may make a temporary sensation under special conditions of the public mind, but, in spite of good intentions, must soon be not only laid aside, but despised by the class which his gaudy taste and false sentiment has temporarily captivated. May it soon be so !

From Titan.

INTERESTING LETTERS OF A BETROTHED.*

FORGIVE me, if I vexed you the evening before last. Indeed, indeed, I did not mean to do so; you must have misunderstood me, and must have mistaken what I meant. I hardly remember what I said; but I know it must have been something very stupid, and very different from the idea I intended to convey. It was such a very happy day, and then, all by my silliness, to end so ill!

But you will forgive me, will you not? when I assure you that nothing was further from my thoughts, than to give you ("pain" scratched out, and "annoyance" substituted.) I had hoped to see you yesterday, or this morning, to tell you this; but as you have not come, and I do not like that you should continue to think I did any thing willfully to offend you, I can not refrain from writing to say how sorry I am, and to ask you to pardon me. I remain, my dear Mr. M—, very sincerely yours,
HONORIA N—.

And so you really love me? I had a hope that it was so, but I was afraid it might be only foolish vanity, and that you paid me so much attention for Walter's sake. Well, I love you, I feel how much, but I can not say it—nor how exquisitely and intensely happy your letter has made me.

This morning when I woke I felt there was some great delight before me. I could not remain in bed, I felt so restlessly happy, and I got up and went into the garden. It was so divinely beautiful! every thing looked so perfectly fresh and pure, it seemed as if it had just been made, and come that moment out of God's hands! Shall I tell you the truth? The thought of you walked beside me in all those paths; and while it filled me with a new sort of felicity, it subdued me as if you had really been there; and I felt that I could not race and sing as I would have done a month ago.

Then, when I was coming in, I met—

oh! what?—the messenger with your letter at the gate; and I felt, somehow, that that was the happiness I had the presentiment of. I took the letter up to my room, but I could not open it at first, and I turned cold and giddy, and my heart beat chokingly. I can't tell you any more, for all my thoughts are confused, and I should say too much or too little; only I am very, very intensely happy, and I love you with all my heart, and thank God with all my soul. Your
HONORIA.

I have sat up till it hath pleased the cuckoo which nests in the hall-clock to announce that yesterday *is* yesterday, just that I might be quite, quite sure I should be the first to wish my own many most happy returns of this his birthday.

Inexpressive and common-place as the phrase is, I can find none that is likely much better to render into words the crowd of thoughts, and hopes, and desires that rise in my heart, not to-night only, but every day and night, and that circle round your beloved head, as doves round a dovecote, forced now and then, by outward necessities, to fly forth for a while, but ever returning, fond and glad, to the spot where alone peace and happiness await.

How homeless, and aimless, and vagrant they were before you made for them this retreat—and how unsatisfied!

I remember how, no later than last year even, I used to long, and fret, and chafe for I knew not what—change, pleasure, travel, society, any thing—every thing in turns became for the moment the object of my ambition; and fits of *ennui*, whose intensity no words could render, succeeded these sickly pinings. Sometimes I fancied study would be a relief, at least a palliative; but—as is usually the case, I imagine, when we read, not for the sake of learning what books can teach us, but merely of forgetting ourselves—I could fix my attention on nothing, and, disgusted, I turned away from them. Poetry, the only reading that afforded me

* *The Letters of a Betrothed.* London: Longman, Brown & Co.

temporary pleasure, rather augmented than calmed this restlessness.

Then you came, and all my heart went forth at once to meet you. I had found the spell to fix my wandering thoughts; from the first they turned to you spontaneously, irresistibly. It was nothing that you said or did that won me; not your words, or your actions, but *yourself*—something in you and about you that drew my whole being to you, and that placed you at once apart from all the world. Every thing in you pleased me, charmed me, gave me food for thought and contemplation—I caught myself repeating phrases of yours, recalling your looks, the tones of your voice, your laugh, your movements, giving significance to your every word and gesture; and all this before you ever gave me one serious reason to imagine that you bestowed on me a thought deeper than such as Walter's sister might, without presumption, claim from his dearest friend. If you had not loved me! sometimes I try to think what would have been then; but I can not realize it—I can not fancy things other than as they are. It seems to me now as if we must both have waited for each other till we met, had it been twenty years hence. You tell me you never loved any woman before; I believe it, not only because I know your truthfulness, but because I can not, I will not, picture to myself any other holding in your regard the place I now hold; and I thank you the more, dearest, for volunteering this assurance, because, that I might not by any possibility be provoked to jealousy of the past, I never would have ventured to ask the question. And yet, and yet, had it been otherwise, should I have loved you less? I know not; but I should have loved you with pain and suffering, with regret for the past and anxiety for the future, instead of, as now, with joy, and pride, and faith implicit.

O my own, my own! *all* my own, ever my own.

"Good-night, good-night! as sweet repose and rest
Come to thy heart, as that within my breast!"

Ah! my blessing, my treasure! I wonder if you have any idea what a delight your letters are to me? Your letters are so *you* that the days they reach me I half forget the veritable Frank is so many

hundreds of miles away; and it seems as if you were giving me the blessing of your presence for a little while—almost—so happy am I, so sun-gilded does every thing look under the beam you throw on it.

I have been at a wedding, I would have you to know—bridesmaid moreover—dressed out in white with green ribbons, and *even you* would have said I looked nice. Fanny B—was the bride; you remember Fanny B—, whom you always used to say provoked you, because, each time you met her, her bright complexion and sunny coloring took in your short-sighted eyes to think she was pretty, when you know that in reality she was what you call "all wrong."

Poor Fanny! when we were neighbor-children, and, like all children, thought it pleasanter to go to any one else's house than to stay in our own, we were, owing to these causes, close friends, and used to spend alternate days at each other's homes—greatly, I have no doubt, to the inconvenience of the senior members of both families—a circumstance of no moment to us, so long as the mutual intrusions were tolerated.

Among many other absurd sentimentalities, we entered into a compact, that whichever married first, the other should be her bridesmaid—a promise which I, I own, had utterly and entirely forgotten, and which oblivion I felt somewhat remorseful about, when reminded of the compact by poor Fanny, who came to claim its fulfillment in announcing her marriage.

To me there are few things so wonderful as some of the marriages I see. Here is a girl, young—what many people call pretty, despite her being "all wrong" in fastidious eyes—well connected, with a happy home, and a certain fortune; and with this she marries a man much older than herself, ugly, vulgar-looking, dull, and hardly richer or in a better position than herself—and what for?—for the sake of being married.

There are, I suppose—so they say—poor wretches who have to marry for a home and bread. Heaven help them, if they have no alternative! Others there are who are mad enough to fancy that they can—give them but gold enough—gild over any amount of domestic misery. Heaven forgive them! or rather enlighten them! But how are we to understand a

woman who quietly gives up her liberty—probably forever—her will, herself, and the chances of what the years may bring her; who, worst of all, takes the risk of meeting later some one who may possess himself of the heart she has never given to the man who holds her hand for evermore—for the sake of being married!

Marriage, with love, is like the parable of him who, having found one pearl of great price, willingly sells all that he has hitherto most valued, in order to possess himself of it. In marriage without love, all these things are given—for what?—for the pleasure of being handcuffed, for the rest of your mortal life, to a man to whom you are now indifferent; who seems to you just like any other man you meet in the street. To this man's will, to this man's commands, temper, caprices, peculiarities, infirmities, tastes, you must submit, till, perhaps, indifference grows to hate and loathing; and then, perchance, comes forward, to pity and console your galled spirit, one who would—or whom you fancy would—have given you happiness in every thing in which this man gives you misery; to whom it would be joy to yield all that is wrung from you by this man's exactions; which—mark this—after all, may not be more than you have promised, of your own uncompelled will at the altar, to concede to him! One from whom, perhaps, no barrier separates you but the single impassable one which your own precipitancy has prematurely placed between you and him. A clever French writer says: "*La seule manière d'alléger le poids de la chaîne du mariage, c'est de la porter à deux.*" See, then, each—as far as human foresight will extend—that your co-partner is one to whom you can safely confide the other end of the chain that binds you; so, but not otherwise, shall it be not merely light, but, being kept from trailing in the mud and on the stones, the gilding will not wear off it.

Such a May and June as we have had! May, all mild, and balmy, and virginal, with fresh, glittering, pearly mornings; warm, bland noons, and still, sweet evenings; the golden day gradually and almost imperceptibly merging into the silver night. From day to day you could trace her steps in the woods, the gardens, the lanes, the meadows, as she touched into leaf and blossom each tree, and shrub, and hedgerow, and gave wings to millions of insects, voice to millions of birds.

All day long you heard the notes, at once mingled and distinct, of these jubilant little beings; the full, round, mellow warble of the thrush and blackbird; "the whit-wall's shrilly laughter;" the quick chirp of the swallows, circling round the roof; the vehement chatter of the sparrows; the soft, sad note of the pigeons in the waving woods; and more indefatigable than all, the passionate ecstasy of the soaring lark. By the by, I came the other day on an old French verse that wonderfully renders the notes of the lark's song; do you know it? Here it is, at all events:

"*La gentille alouette avec son tire-lire,
Tire-lire a liré et tire-lire à lire,
Vers la voûte du ciel, puis son vol vers ce lieu
Vire, et désire dire, 'Adieu Dieu, Adieu
Dieu!'*"

Is it not like?

Then one by one all the voices dropped off into silence and sleep. The air freshened—the laurels quivered in the little fitful gusts of the breeze—the pines sighed—the horse-chestnuts, so heavy with their masses of foliage and flowers, swayed languidly—and up rose the large, white moon, seeming to take the hushed world unawares. But one was waiting for her; a few quick, clear, yet cautious notes, struck a prelude, and then followed the wondrously varied song of the solitary nightingale; so shy, so proud, that after each trill, and burst, and cadence, he would pause, as if to listen and make sure no one heard him.

Then came June, all in a glow, and already a little sun-burnt, with earlier ripened mornings, more fervid noons wrapt in quivering haze, fuller-leaved trees, shutting out bits of prospect here and there, while giving richness to the rest; bluer distances, warmer-tinted flowers, evenings more golden, yellower moons, nights of an atmosphere half languor, half passion. And then, when all this glow and fervor had begun to make poor earth a little parched and faint, would come down a golden shower, which she, another Danaë, turned to roses as it touched her.

See the pages I have written, and not half my say said yet! And I might write as many more, and be but little further advanced in it. So adieu for the moment, my very own; love me as much you can, and believe that I love you as much as—as I do.

HONORIA.

From Colburn's New Monthly.

A DREAM OF NAXOS.

BY MARY C. F. MONCK.

THE sun went down upon the Grecian sea,
And on the fair and lovely Cyclades,
Quenching his fiery arrows in the waves—
The blue, smooth-swelling, foam-bell'd summer
waves—
That broke in music on the yellow sands.

A charmed heaven was o'er me, and around
Lay scenes which well might tempt to the belief
Held by the ancient poets, that their gods
Had oft forsaken the august delights
Of high Olympus for the odorous shades
And verdant meads of Naxos.
Snow-white flocks
Fed on the rich soft herbage of the vales,
Where wandering streams, so free from aught impure
That one might count the white and purple shells
And tinted pebbles of their shallow beds,
Now mirrored back the changes of the sky,
And now in pools more deep and dark, yet clear,
Beneath the dark-leaved, fair-flowered myrtle boughs,
Formed baths, where in the haunted days of old
The heated nymphs had laved their beauteous forms,
Fearless that gaze of Satyr or of Faun
Could pierce the screen of bell, and bud, and leaf.

The soft air bathed my brow with cooling balm
Of aromatic blossoms, for the hills
That met the shore were overgrown with thyme.
And scented heath, whence the great golden bees,
Which build their nests in hollows of the rocks,
Sucked such rich fragrant juices as might shame
The boasted limpid honey of the mounts
Of Hybla and Hymettus.

From the woods,
Where the pomegranate ripened in the sun,
And groves of orange and of lemon bent
With fruit, that through the glossy dark green leaves
Gleamed like red orbs of gold, came murmurings
Of happy winged creatures; and the elms
Were crowned with such long wreaths of clustered
grapes
And graceful leaves, as the close twining vines
Clad their rough arms with beauty, that I thought
The curls of Bacchus never wore a crown
Would lend them more of grace.

Along the heights
The pale-hued olives waved, and giant figs
Mellowed to ripeness, and great mulberries,
With thousand other of her richest gifts,
The earth bestowed upon this favored isle.
And as I lay beneath the drooping vines,
The hum of insects, and the low sweet moan
Of the bright ocean, lulled me into rest.
But with such gentle pace did sleep come on,
So gradual was the drawing of the veil
Between my senses and the outer world,

I felt not where thought faded into dreams.
I saw upon the rocks a human form—
A woman, beautiful, and fair, and young—
Alas! that beauty such as hers no more
Is seen on earth, to urge the sculptor's art
To emulate its perfect outward form,
And bid the poet breathe his life away
In the fond effort to find glowing words
That might, however faintly, shadow forth
The loving heart within, that lent its charm
To every glance and gesture.

On the rocks
She lay asleep; her golden hair, unbound,
Flowed in rich masses of bright wavy curls
Over her white robe to her little feet,
Half-buried in the green and yielding moss.
One white arm pillowed that sweet antique head,
Whose straight, pure, delicate outline had no peer,
And a warm flush burned on the smooth round
cheek,
Whose dimples, as she smiled in happy dreams,
Showed like the ripples of a glassy lake
With sunset glories on it.

As she breathed,
The radiant silken tresses o'er her spread
Heaved with the heaving of the swan-white breast
They but half veiled.

I knew her queenly brow—
The daughter of a king—the beautiful,
The peerless Ariadne, and I bent
To catch the perfume of the gentle breath
That issued from her red, red parted lips.
But as I bent, the fringes—gold-tipped, long,
And brown as autumn nuts—that edged those lids
So fair and delicately veined, were stirred—
A moment quivered. Then her starry eyes
Beamed full upon me, darkly blue and clear
As is the cloudless sky of summer noon
Reflected in a shadowy woodland stream.
One hasty glance she cast around the spot,
And starting up, she scanned the shining beach,
Where the moist sand bore traces of a keel
Dragged o'er it hastily.

Then wild alarm
Paled her young face, and lightened in her eye.
She wrung her fairy hands, and cried aloud,
And the gray mountains, and the silent vales,
The sounding shore with all its creeks and bays,
The air above her, and the woods beneath,
With thousand echoing tones gave back the cry
Of "Theseus! Theseus!" but no other voice
Gave answer to her wail. And now her gaze
Discerned upon the far horizon's bound
A bark, so distant that to other eyes
It might have seemed a sea-bird on the waves.
But she, the lost, deserted, knew it well:
It was her false love's galley.

How she wept,
And rent her golden hair, and beat her breast,
Let them whose love like hers has been betrayed,
Find words to tell—my heart can give me none.

"O Theseus! Theseus! hast thou left me thus?
Me! and I periled life to save thee thine!
Me! and I left my father and my kin,
Forgot the duty that a daughter owes
To him who gave her life, to rescue thee
From the dread labyrinth—and all for this!
I know thou wilt come back to me no more—
Thou wilt not come to her who hath not else
In all the world but thee. O Theseus! Theseus!
Is this the end of all thy vows, thy oaths,
That won me to forget all else but thee?
O Ariadne! miserable, lost,
Deserted Ariadne! Cursed for aye
The day that saw thee born, and doubly cursed
The hour that brought that stranger, false and fair,
Before thy sight! My Theseus! oh! return!
'Tis but some idle sport to try my love—
But be not cruel or suspicious, Theseus.
Have I not proved how much my love could bear,
To please or profit thee? Come back, come back!
Oh! shall I not behold thee any more?

But still the echoes answered her alone,
And still the distant bark kept on its way
Between the sea and sky—now but a speck—
Now fainter—farther still—and now 'tis gone,
And the monotonous lapping of the sea
Brought back the waters that had borne him on.

But while she wept and raved, I saw advance
From a dim marble grotto in the hills

A being on whose vine-wreathed, bright-tressed
head
Rested a glory and a joyous youth
No mortal ever wore; his face was flushed,
And one hand held his thymus.

It was he,
The deity of Naxos, and he came
To comfort and to woo the beauteous waif
The bounteous ocean had cast upon his isle.
At first she shrank from him, and would not hear
The words he spake. But soon her shrieks were
lulled

To moans and sobs; and as he further urged,
She sat in silence, listening, but her eyes
Still wandering o'er the waters. Then at length
She yielded to his guiding hand, and rose.
And so he led her o'er the glistening sands,
Along the shore toward his temple grot;
But ever and anon she turned her head,
And took the wide horizon in a glance,
And with a brief and sudden frenzy seized,
Cried: "Theseus, my loved Theseus! oh! return!"

But I awoke, and knew that I had dreamed
Of fables that were once religious faith;
And dull reality chased far away
The vision of the maiden in her woe,
And the consoling Bacchus.

Can it be,
That in this old-world story of the nymph
So comforted, doth lurk a hidden jest,
And Ariadne, when she found her love
Gone, fled forever, sought and haply found
Forgetfulness in the inspiring draughts
Which claim the jovial Bacchus for their god?

From the London Critic.

DO YOU REALLY THINK HE DID?

I WAITED till the twilight,
And yet he did not come;
I strayed along the brook side,
And slowly wandered home—
When who should come behind me
But him I would have chid;
He said he came to find me—
Do you really think he did?

He said since last we parted,
He'd thought of naught as sweet,
As of this very moment—
The moment we should meet.

He showed me where, half-shaded,
A cottage home lay hid;
He said for me he made it—
Do you really think he did?

He said when first he saw me,
Life seemed at once divine;
Each night he dreamt of angels,
And every face was mine;
Sometimes a voice, in-sleeping,
Would all his hopes forbid;
And then he wakened, weeping—
Do you really think he did;

From the Westminster Review.

RECENT ASTRONOMY, AND THE NEBULAR HYPOTHESIS.*

WHEN Sir William Herschel, directing his great reflector to various nebulous spots, found that they were resolvable into clusters of stars, he inferred, and for a time maintained, that all nebulous spots are clusters of stars exceedingly remote from us. But after years of conscientious investigation, he concluded that "there were nebulosities which are not of a starry nature;" and on this conclusion was based his hypothesis of a diffused luminous fluid, which, by its eventual aggregation, produced stars. A telescopic power, much exceeding that which Herschel employed, has enabled Lord Rosse to resolve some of the nebulae which before remained unresolved; and, returning to the conclusion which Herschel first formed on similar grounds but afterwards rejected, many astronomers have assumed that under sufficiently high powers all nebulae would be decomposed into stars—that the resolvability is solely a question of distance. The hypothesis now commonly entertained is, that all nebulae are galaxies of stars more or less like in nature to that immediately surrounding us; but that they are so inconceivably remote, as to look through an ordinary telescope like small faint spots. And those who lean to the old anthropomorphic idea of creation, have drawn the further corollary, that by the discoveries of Lord Rosse the nebular hypothesis has been disproved.

Now, even supposing that these inferences respecting the distances and na-

tures of the nebulae are valid, they leave the nebular hypothesis substantially as it was. Admitting it to be true that each of these faint spots is a sidereal system, so far removed that its countless stars give less light than one small star of our own sidereal system, the admission is in no way inconsistent with the belief that stars and their attendant planets have been formed by the aggregation of nebulous matter. Though, doubtless, if the existence of nebulous matter, now in course of concentration, be disproved, one of the evidences of the nebular hypothesis is destroyed, yet the remaining evidences remain just as they were. It is a perfectly tenable position, that though nebular condensation is now no where to be seen in progress, yet that it was once going on universally, as indicated by the internal evidence of the solar system. And indeed it might be argued that the still continued existence of diffused nebulous matter was scarcely to be expected; seeing that the causes which have resulted in the aggregation of one mass must have been acting on all masses, and that the existence of masses not aggregated would be a fact calling for explanation. Thus, granting the immediate conclusions suggested by these recent disclosures of the six-foot reflector, the corollary which many have drawn is utterly inadmissible.

But we do not grant these conclusions. Receiving them though we have for years past as established truths, a critical examination of the facts has convinced us that they are quite unwarrantable. They involve so many manifest incongruities, that we have been astonished to find men of science entertaining them even as probable hypotheses. Let us consider these incongruities.

In the first place, mark what is inferable from their distribution:

"The spaces which precede or which follow simple nebulae," says Arago, "and *à fortiori*, groups of nebulae, contain generally few stars. Herschel found this rule to be invariable. Thus, every time that, during a short interval, no star approached, in virtue of the diurnal motion, to place itself in the field of his motionless tele-

* *Œuvres de Laplace*. Paris: Imprimerie Royale. 1843.

Outlines of Astronomy. By Sir JOHN F. W. HERSCHEL, Bart., K.H. London: Longman and Co. 1849.

Results of Astronomical Observations at the Cape of Good Hope, etc. By Sir JOHN F. W. HERSCHEL, Bart., K.H.

Cosmos: Sketch of a Physical Description of the Universe. By ALEXANDER VON HUMBOLDT. Vols. 1, 2, 3, Murray's edition; Vol. 4, BOHN's edition.

Popular Astronomy. By FRANÇOIS ARAGO. Translated from the original, and edited by Admiral W. H. SMYTH and ROBERT GRANT, Esq. Longman and Co. 1855.

The Recent Progress of Astronomy; especially in the United States. By ELIAS LOOMIS, LL.D. Third edition. New-York: Harper Brothers. 1856.

scope, he was accustomed to say to the secretary who assisted him: 'Prepare to write; nebulae are about to arrive.'

How does this fact consist with the hypothesis that nebulae are remote galaxies? If there were but one nebula, it would be a curious coincidence were this one nebula so placed in the distant regions of space as to agree in direction with a starless spot in our own sidereal system. If there were but two nebulae, and both were so placed, the coincidence would be excessively strange. What then shall we say on finding that there are thousands of nebulae which are so placed? Shall we believe that these far-removed galaxies, dispersed through infinite space, have in thousands of cases happened to agree in visible position with the thin places in our own galaxy? Such a belief is next to impossible. Still more manifest does the impossibility of it become when we consider the nebulae in their general distribution. Not only does the law above specified apply to larger portions of the heavens, as seen in the fact that "the poorest regions in stars are near the richest in nebulae," but it applies to the heavens as a whole. In that zone of celestial space where stars are excessively abundant, nebulae are extremely rare; while in the two opposite celestial spaces that are furthest removed from this zone, nebulae are extremely abundant. Scarcely any nebulae lie near the galactic circle, (or plane of the Milky Way;) and the great mass of them lie round the galactic poles. Can this also be mere coincidence? When to the fact that the general mass of nebulae are antithetical in position to the general mass of stars, we add the fact that local regions of nebulae are regions where stars are scarce, and the further fact that single nebulae are habitually found in comparatively starless spots, does not the proof of a physical connection become overwhelming? Should it not require an infinity of evidence to show that nebulae are not parts of our sidereal system? Let us see whether any such infinity of evidence is assignable. Let us see whether there is even a single alleged proof which will bear examination.

"As seen through colossal telescopes," says Humboldt, "the contemplation of these nebulous masses leads us into regions from whence a ray of light, according to an assumption not wholly improbable, requires millions of years

to reach our earth—to distances for whose measurement the dimensions (the distance of Sirius, or the calculated distances of the binary stars in Cygnus and the Centaur) of our nearest stratum of fixed stars scarcely suffice."

Now, in this somewhat confused sentence there is expressed a more or less decided belief, that the distances of the nebulae from our galaxy of stars, as much transcend the distances of our stars from each other, as these interstellar distances transcend those of our planetary system. Just as the diameter of the Earth's orbit is an inappreciable point when compared with the distance of our Sun from Sirius; so is the distance of our Sun from Sirius an inappreciable point when compared with the distance of our galaxy from those far removed galaxies constituting nebulae. Observe now the consequences of this assumption.

If one of these supposed galaxies is so remote that its distance dwarfs our interstellar spaces into points, and therefore makes the dimensions of our whole sidereal system relatively insignificant, does it not inevitably follow that the telescopic power required to resolve this remote galaxy into stars, must be incomparably greater than the telescopic power required to resolve the whole of our own galaxy into stars? If the assumption be true, does it not follow than an instrument which can just exhibit with clearness the most distant stars of our own cluster, must be utterly unable to separate these remote clusters into stars? What then are we to think when we find that the same instrument which decomposes hosts of nebulae into stars, *fails* to resolve completely our own Milky Way? Supposing, to use a homely comparison, a man surrounded by a swarm of bees, extending, as they sometimes do, so high in the air as to become individually almost invisible, were to declare that a certain spot in the horizon was a swarm of bees, and that he knew it because he could see the bees as separate specks. Astounding as the assertion would be, it would not exceed in incredibility this which we are criticising. Reduce the dimensions to figures, and the absurdity becomes still more palpable. In round numbers, the distance of Sirius from the Earth is a million times the distance from the Earth to the Sun; and, according to the hypothesis, the distance of a nebula is something like a million times the distance of Sirius. Now, our

own "starry island, or nebula," as Humboldt calls it, "forms a lens-shaped, flattened, and every where detached stratum, whose major axis is estimated at seven or eight hundred, and its minor axis at a hundred and fifty times the distance of Sirius from the earth."* And since it is concluded that our own solar system is somewhere near the center of this aggregation, it follows that our distance from the remotest parts of it is about four hundred distances of Sirius. But the stars forming these remotest parts are not individually visible, even through telescopes of the highest power. How then can such telescopes make individually visible the stars of a nebula which is a million times the distance of Sirius? The implication is, that a star rendered invisible by distance becomes visible if taken two thousand five hundred times further off! Shall we accept this implication? or shall we not rather conclude that the nebulae are *not* remote galaxies? Shall we not infer that, be their nature what it may, they must be at least as near to us as the extremities of our own sidereal system?

Another incongruity, equally insurmountable, meets us when we contrast the relative sizes and resolvabilities of the nebulae. It is an assumption habitually made with respect to the stars, that their differences of magnitude are chiefly dependent upon differences of distance—that the largest are the nearest, while the successively smaller are successively more remote; and although, as involving the supposition that all stars are actually of the same size, this is not literally true in detail, yet investigation has shown good reason for believing it true as an average fact. But the arguments which justify this assumption in the case of the stars, equally justify it in the case of the nebulae. It is in the highest degree improbable that all the small nebulae are relatively near, and the large ones relatively far off; or *vice versa*. The only warrantable supposition is, that such differences of *actual* size as exist among them have no relation to their distances from us; but that small and large are dispersed through space with what we may call a regular irregularity. And hence it follows that, on the average, the *apparent* sizes of the nebulae will indicate their distances—that, speaking generally, the

larger ones are the nearer ones, and the smaller the more distant. Mark, now, the necessary inference respecting their resolvability. It must follow that, in the great majority of cases, the largest or nearest nebulae will be most easily resolved into stars; that the successively smaller will be successively more difficult of resolution; and that the irresolvable ones will be the smallest ones. This, however, is exactly the reverse of the fact. The largest nebulae are either wholly irresolvable, or but partially resolvable under the highest telescopic powers; while a large proportion of quite small nebulae are easily resolved by far less powerful telescopes. The same instrument through which the great nebula in Andromeda, two and a half degrees long and one degree broad, appears merely as a diffused light, decomposes a nebula of fifteen minutes diameter into twenty thousand starry points. While the individual stars of a nebula eight minutes in diameter are so clearly seen as to allow of their number being estimated, a nebula covering an area five hundred times as great shows no stars at all. What possible explanation can be given of this on the current hypothesis?

Yet another difficulty remains—one which is, perhaps, still more obviously fatal than the foregoing. This difficulty is presented by the phenomena of the Magellanic clouds. Describing the larger of these, Sir John Herschel says:

"The nubecula major, like the minor, consists partly of large tracts and ill-defined patches of irresolvable nebula, and of nebosity in every stage of resolution, up to perfectly resolved stars like the Milky Way; as also of regular and irregular nebulae properly so called, of globular clusters in every stage of resolvability, and of clustering groups sufficiently insulated and condensed to come under the designation of 'cluster of stars.'"—*Cape Observations*, p. 146.

In his *Outlines of Astronomy*, Sir John Herschel, after repeating this description in other words, goes on to remark that—

"This combination of characters, rightly considered, is in a high degree instructive, affording an insight into the probable comparative distance of *stars* and *nebulae*, and the real brightness of individual stars as compared with one another. Taking the apparent semi-diameter of the nubecula major at three degrees, and regarding its solid form as, roughly speaking, spherical, its nearest and most remote parts differ in their distance from us by a little more than a tenth part of our distance from its center. The brightness of objects situated in its nearer

* *Cosmos*. Seventh Edition. Vol. i. pp. 79, 80.

portions, therefore, can not be *much* exaggerated, nor that of its remoter *much* enfeebled, by their difference of distance. Yet within this globular space we have collected upwards of six hundred stars of the seventh, eighth, ninth, and tenth magnitude, nearly three hundred nebulae, and globular and other clusters of *all degrees of resolvability*, and smaller scattered stars of every inferior magnitude, from the tenth to such as by their multitude and minuteness constitute irresolvable nebulosity, extending over tracts of many square degrees. Were there but one such object, it might be maintained without utter improbability that its apparent sphericity is only an effect of foreshortening, and that in reality a much greater proportional difference of distance between its nearer and more remote parts exists. But such an adjustment, improbable enough in one case, must be rejected as too much so for fair argument in two. It must, therefore, be taken as a demonstrated fact, that stars of the seventh or eighth magnitude, and irresolvable nebula, may coexist within limits of distance not differing in proportion more than as nine to ten."—*Outlines of Astronomy*, pp. 614, 615.

Now, we think this clearly supplies a *reductio ad absurdum* of the doctrine we are combating. It gives us the choice of two incredibilities. If we are to believe that one of these nebulae is so remote that its hundred thousand stars look only like a milky spot, invisible to the naked eye, we must, at the same time, believe that there are single stars so enormous that though removed to this same distance they remain visible. If we accept the other alternative, and say that many nebulae are no further off than our own stars of the eighth magnitude, then it is requisite to believe that at a distance not greater than that at which a single star is still faintly visible to the naked eye, there may exist a group of a hundred thousand stars which is invisible to the naked eye. Neither of these positions can be entertained. What, then, is the conclusion that remains? This only: that the nebulae are not further off from us than parts of our own sidereal system, of which they must be considered members; and that when they are resolvable into discrete masses, these masses can not be considered as stars in any thing like the ordinary sense of that word.

And now having, as we believe, disposed of this idea, rashly promulgated by sundry astronomers, that the nebulae are extremely remote galaxies, let us see whether the various appearances they present are not reconcilable with the nebular hypothesis. Rightly interpreted, we

believe they will be found in entire harmony with it.

Starting with the assumption of a rare and widely-diffused mass of nebulous matter, having a diameter, say as great as the distance from the sun to Sirius,* let us consider the successive changes that will take place in it. Mutual gravitation will approximate its atoms; but their approximation will be opposed by atomic repulsion, the overcoming of which implies the evolution of heat. As fast as this heat partially escapes by radiation, further approximation will take place, attended by further evolution of heat, and so on continuously: the processes not occurring separately as we have described them, but simultaneously, uninterruptedly, and with increasing activity. Eventually this slow movement of the atoms towards their common center of gravity, will bring about an entirely new set of phenomena. Arguing from the established laws of atomic combination, it will happen that when the nebulous mass has reached a certain stage of condensation—when its internally-situated atoms have approached to within a certain distance, have generated a certain amount of heat, and are subject to a certain mutual pressure, (the heat and pressure both increasing as the aggregation progresses,) some of them will suddenly enter into chemical union. Whether the binary atoms so produced be of kinds such as we know, which is possible, or whether they be of kinds simpler than any we know, which is more probable, matters not to the argument. It suffices that molecular combination of some species will finally take place. When it does take place, it will be accompanied by a great and sudden disengagement of heat; and until this excess of heat has escaped, the newly-formed binary atoms will remain uniformly diffused, or, as it were, dissolved in the preëxisting nebulous medium. But now mark what must by and by happen. When by radiation the temperature has been adequately lowered, these binary atoms will precipitate; and having precipitated, they will not remain uniformly diffused, but will aggregate into *floculi*, just as water, when precipi-

* Any objection that may be raised to the extreme tenuity this involves, is at once met by the calculation of Newton, who proved that were a spherical inch of air removed four thousand miles from the Earth, it would expand into a sphere more than filling the orbit of Saturn.

tated from air, collects into clouds. And, indeed, this *à priori* conclusion is confirmed by the observation of those still extant portions of nebulous matter which constitute comets; for, "that the luminous part of a comet is something in the nature of a smoke, fog, or cloud, suspended in a transparent atmosphere, is evident," says Sir John Herschel. Concluding, then, as we are warranted in doing, that a nebulous mass will, in course of time, resolve itself into flocculi of precipitated denser matter, floating in the rarer medium from which they were precipitated, let us inquire what will be the mechanical results. We shall find that they will be quite different from those occurring in the original homogeneous mass, and also quite different from those which would occur among bodies dispersed through empty space. A group of bodies dispersed through empty space would move in straight lines toward their common center of gravity. So, too, with a group of bodies dispersed through a resisting medium, provided they were spherical, or of forms presenting symmetrical faces to their lines of movement. But a group of *irregular* bodies dispersed through a resisting medium will *not* move in straight lines towards their common center of gravity. A mass which presents an *irregular* face to its line of movement through a resisting medium, will necessarily be deflected from its original course, by the unequal reactions of the medium on its different sides. Hence, each *flocculus*, as, by analogy, we term one of these precipitated masses of gas or vapor, will acquire a movement, not towards the common center of gravity, but towards one or other side of it; and this more or less oblique movement, accelerated as well as changed in direction by the increasing centripetal force, but retarded by the resisting medium, will result in a spiral, ending in the common center of gravity. Observe, however, that this conclusion, valid as far as it goes, by no means proves a common spiral movement of all the flocculi; for as their forms must not only be varied in kind, but disposed in all varieties of position, it must happen that their respective movements will be deflected, not towards one side of the common center of gravity, but towards various sides. How then can there result a spiral movement common to them all? Very simply. Each flocculus, in de-

scribing its spiral course, must give motion to the rarer medium through which it is moving. Now, the probabilities are infinity to one against all the respective motions thus impressed on this rarer medium, exactly balancing each other. And if they do not balance each other, the inevitable result must be a rotation of the whole mass of the rarer medium in some one direction. But preponderating momentum in some one direction, having caused rotation of the medium in that direction, the rotating medium must in its turn gradually arrest such flocculi as are moving in opposition, and must impress its own motion upon them; and thus there will ultimately result a rotating medium with suspended flocculi partaking of its motion while they move in converging spirals towards the common center of gravity.

Before comparing these conclusions with the facts, let us pursue the reasoning a little further, and observe the subordinate actions and the endless modifications which will result from them. The respective flocculi must not only be drawn towards their common center of gravity, but also towards neighboring flocculi; and, as a result of this play of forces, the whole assemblages of flocculi will break up into subordinate groups: each group concentrating towards its local center of gravity, and in so doing acquiring a vortical movement, like that subsequently acquired by the whole nebula. Now, according to circumstances, and chiefly according to the size of the original nebulous mass, this process of local aggregation will produce various results. If the whole nebula is but small, the local groups of flocculi may be drawn into the common center of gravity before yet their constituent masses have coalesced with each other. In a larger nebula, these local aggregations may have concentrated into rotating spheroids of vapor, while yet they have made but little approach towards the general focus of the system. In a still larger nebula, where the local aggregations are both greater and more remote from the common center of gravity, complete concentration into rotating masses of molten matter may have arisen before the general distribution of them has greatly altered. In short, as the conditions in each case determine, the discrete masses produced may vary indefinitely in number, in size, in density, in motion, in distribution.

And now let us return to the visible characters of the nebulae, as observed through modern telescopes. Take first the description of those nebulae which, by the hypothesis, must be in an early stage of evolution:

"Among the *irregular nebulae*," says Sir John Herschel, "may be comprehended all which, to a want of complete, and in most instances, even of partial resolvability by the power of the twenty-foot reflector, unite such a deviation from the circular or elliptic form, or such a want of symmetry (with that form) as preclude their being placed in Class 1, or that of regular nebulae. This second class comprises many of the most remarkable and interesting objects in the heavens, as well as the most extensive in respect of the area they occupy."

And, referring to this same order of objects, M. Arago says: "The forms of very large diffuse nebulae do not appear to admit of definition; they have no regular outline."

Now, the fact that the largest nebulae are either irresolvable or very difficult to resolve, might have been inferred *a priori*; seeing that irresolvability, implying that the aggregation of precipitated matter has gone on to a small extent, will be found in nebulae of wide diffusion. Again, the irregularity of these large irresolvable nebulae might also have been expected; seeing that their outlines, compared by Arago to "the fantastic figures which characterize clouds carried away and tossed about by violent and often contrary winds," are similarly characteristic of a mass not yet gathered together by the natural attraction of its parts. And once more, the fact that these larger, irregular, irresolvable nebulae have indefinite outlines—outlines that fade off insensibly into surrounding darkness—is one of like meaning.

Speaking generally, (and of course differences of distance negative any thing beyond an average statement,) the spiral nebulae are smaller than the irregular nebulae, and more resolvable; at the same time that they are not so small as the regular nebulae, and not so resolvable. This is as, according to the hypothesis, it should be. The degree of condensation causing spiral movement, is a degree of condensation also implying masses of flocculi that are larger, and therefore more visible, than those existing in an earlier stage. Add to which, that the forms of these spiral nebulae are quite in harmony with the explanation given. The curves of

luminous matter which they exhibit, are *not* such as would be described by more or less discrete masses starting from a state of rest, and moving through a resisting medium to a common center of gravity; but they *are* such as would be described by masses having their movements modified by the rotation of the medium.

In the center of a spiral nebula is seen a mass both more luminous and more resolvable than the rest. Assume that, in process of time, all the spiral streaks of luminous matter which converge to this center are drawn into it, as they must be; assume further, that the flocculi or other discrete bodies constituting these luminous streaks aggregate into larger masses at the same time that they approach the central group, and that the masses forming this central group also aggregate into larger masses, (both which are necessary assumptions,) and there will finally result a more or less globular group of such larger masses, which will be resolvable with comparative ease. And, as the coalescence and concentration will still go on, the constituent masses will gradually become fewer, larger, brighter, and more densely collected around the common center of gravity. See now how completely this inference agrees with observation. "The circular form is that which most commonly characterizes resolvable nebulae," writes Arago. "Resolvable nebulae," says Sir John Herschel, "are almost universally round or oval." Moreover, the center of each group habitually displays a closer clustering of the constituent masses about the center of gravity than elsewhere; and it is shown that, under the law of gravitation, which we know extends to the stars, this distribution is *not* one of equilibrium, but implies progressing concentration. While, just as we inferred that, according to circumstances, the extent to which aggregation has been carried must vary; so we find that, in fact, there are regular nebulae of all degrees of resolvability, from those consisting of innumerable minute discrete masses, to those in which there are a few large bodies worthy to be called stars.

On the one hand, then, we see that the notion, of late years idly repeated and uncritically received, that the nebulae are extremely remote galaxies of stars like those which make up our own milky-way, is totally irreconcilable with the facts—involves us in sundry absurdities. On

the other hand, we see that the nebular hypothesis, rightly understood, is in entire harmony with the most recent results of stellar astronomy; nay more, that it supplies us with an explanation of various appearances which in its absence would be incomprehensible.

Descending now to the solar system, let us consider first a class of phenomena in some sort transitional—those offered by comets. In comets we have now existing a kind of matter like that out of which, according to the nebular hypothesis, the solar system was evolved; and hence, for the explanation of them, we must go back to the time when the matter forming the sun and planets was yet unconcentrated. Let us do this.

When vapor or other diffused matter, precipitated from a rarer medium, is aggregating into flocculi, there are certain to be here and there produced small portions of flocculi, which, either in consequence of local currents or the conflicting attractions of adjacent masses, remain detached; as do, for instance, minute shreds of cloud in a summer sky. In a concentrating nebula these will, in the great majority of cases, eventually coalesce with the larger flocculi near to them; but if we consider what will happen in the outermost parts of the nebulous mass, we shall see that some of the remotest of the small fragments will *not* coalesce with the larger internal masses, but will slowly follow without overtaking them. The relatively greater resistance of the medium necessitates this. Just as a single feather falling to the ground will be rapidly left behind by a pillow full of feathers; so, in their progress to the common center of gravity, will the outermost shreds of flocculi be left behind by the great masses of flocculi internally situated. But we are not dependent merely upon reasoning for this belief. Observation shows us that the less concentrated external parts of nebulae are left behind by the larger masses. Examined through high powers, all nebulae, even when they have assumed regular forms, are seen to be surrounded by luminous streaks, whose directions show that they are being drawn into the general mass. Still higher powers bring into view still smaller, fainter, and more widely dispersed streaks. And it can not be doubted that the minute fragments which no telescopic aid can

make visible, are yet more numerous and more widely dispersed. Thus far, then, inference and observation are at one.

Granting that the great majority of these outlying portions of nebulous matter will be drawn into the central mass long before it reaches a definite form, the presumption is that some of the very small, far-removed fragments will not be so; but that before they arrive near it the central mass will have contracted into a comparatively moderate bulk. What now will be the characteristics of these late-arriving fragments?

In the first place, they will have extremely eccentric orbits. Left behind at a time when they were moving towards the center of gravity in slightly deflected lines, and therefore having but very small angular velocities, they will approach the central mass in greatly elongated ellipses, and rushing round it will again go off into space. That is, they will behave just as we see comets do; whose orbits are usually so eccentric as to be indistinguishable from parabolas.

In the second place, they will come from all parts of the heavens. Our supposition implies that they separated at a time when the nebulous mass was of irregular shape, and had not acquired a definite rotatory motion; and as there is no reason why the separation of them should have occurred exclusively on any one surface of the nebulous mass, the conclusion must be that they will come to the central body from various directions in space. This, too, is exactly what happens with comets. Unlike the planets, whose orbits approximate to one plane, the comets have orbits that show no relation to each other, but cut the plane of the ecliptic at all angles.

In the third place, applying the reasoning already used, these remotest flocculi of nebulous matter will, at the outset, be deflected from their straight courses to the common center of gravity, not all on one side, but each on such side as its form determines. And being left behind before the rotation of the nebula is set up, they will severally retain their different individual motions. Hence it must happen that, following the concentrating mass, they will eventually go round it on all sides; and as often from right to left as from left to right. Here again the inference perfectly corresponds with the facts. While all the planets go round the

sun from west to east, comets as often go round the sun from east to west as from west to east. Out of 210 comets known in 1855, 104 are direct, and 106 are retrograde. This equality is just what the law of probabilities would indicate.

Then, in the fourth place, the physical constitution of comets completely accords with the hypothesis. The ability of nebulous matter to concentrate into a concrete form, depends altogether on its mass. To bring its ultimate atoms into that proximity requisite for chemical union—requisite, that is, for the production of denser matter—their repulsion must be overcome. The only force which is in antagonism with their repulsion is their mutual gravitation. That their mutual gravitation may generate a pressure of sufficient intensity, there must be an enormous accumulation of them; and even then the approximation can only slowly go on as fast as the evolved heat escapes. But where the aggregation of atoms is very small, and therefore the force of mutual gravitation very small, there will be nothing to coerce the atoms into union. From which we infer that these detached fragments of nebulous matter will continue in their original state. We find that, in fact, they do so continue. Comets consist of an extremely rare medium, which, as shown by the description already quoted from Sir John Herschel, has characters like those we concluded would belong to partially condensed nebulous matter.

Yet another very significant fact is seen in the distribution of comets. Though they come from all parts of the heavens, they by no means come in equal abundance from all parts of the heavens; but are far more numerous about the poles of the ecliptic than about its plane. The following table, drawn up by M. Arago, to which we have added a column, giving the results up to a date two years later, will show this:

Inclinations.	Number of Comets in 1851.	Number of Comets in 1853.	Number of Comets in 1855.
From 0° to 10°	9	19	19
" 10° " 20°	18	18	19
" 20° " 30°	10	18	14
" 30° " 40°	17	22	23
" 40° " 50°	14	35	36
" 50° " 60°	23	27	29
" 60° " 70°	17	23	25
" 70° " 80°	19	26	27
" 80° " 90°	15	18	19
Total,	137	201	210

At first sight this table seems not to warrant our statement, but to show that the frequency of comets increases as we progress from the plane of the ecliptic up to 45°, and then decreases up to 90°. But this apparent diminution arises from the fact that the successive zones of space rapidly diminish in area on approaching the poles. If we allow for this, we shall find that the excess of comets continues to increase up to the highest angles of inclination. In the table below, which for convenience is arranged in inverted order, we have taken as standards of comparison the area of the zone round the pole, and the number of comets it contains; and having ascertained the areas of the other zones, and the numbers of comets they should contain were comets equally distributed, we have shown how great becomes the deficiency in descending from the poles of the ecliptic to its plane.

Between	Area of Zone.	Number of Comets, if equally Distributed.	Actual Number of Comets.	Deficiency.	Relative Abundance.
90° and 80°	1	19	19	0	11·5
80° " 70°	2·98	56·6	27	29·6	5·5
70° " 60°	4·85	92	25	67	3·12
60° " 50°	6·6	125	29	96	2·66
50° " 40°	8·18	154	26	118	2·63
40° " 30°	9·42	179	22	157	1·4
30° " 20°	10·42	198	14	184	0·8
20° " 10°	11·1	210	19	191	1·04
10° " 0°	11·5	218	19	199	1

In strictness, the calculation should be made with reference, not to the plane of the ecliptic, but to the plane of the sun's equator; and probably this would render the progression more regular. But even as it is, the fact that comets are 11·5 times more abundant about the poles of the ecliptic than about its plane, is sufficiently significant.

What, then, is the meaning of this fact? It has several meanings. It negatives the supposition, favored by Laplace among others, that comets are bodies that were wandering in space, or have come from other systems; for the probabilities are almost infinity to one against the orbits of such wandering bodies showing any definite relation to the plane of the solar system. For the like reason it negatives the hypothesis of Lagrange, otherwise objectionable, that comets have resulted from planetary catastrophes analogous to that which is supposed to have produced the asteroids. It clearly shows that, instead of comets being *accidental* members

of the solar system, they are *necessary* members of it—have as distinct a structural relation to it as the planets themselves. That comets are abundant around the axis of the solar system, and grow rarer as we approach its plane, implies that the genesis of comets has followed some *law*; and that this law is in some way concerned with the genesis of the solar system. If we ask for any so-called final cause of this arrangement, none can be assigned; seeing that, even could comets be shown to have any probable use, no reason could be given why they should be thus distributed. But when we consider the question as one of physical science, we see that comets are antithetical to planets, not only in their great rarity, in their motions as indifferently direct or retrograde, in their eccentric orbits, and in the varied directions of those orbits; but we see the antithesis further marked in this, that while planets have some relation to the plane of nebular rotation, comets have some relation to the axis of nebular rotation.* And without attempting to explain the nature of this relation, (though we believe a probable explanation may be given,) the mere fact that such a relation exists, indicates that comets have resulted from some process of evolution—points to a past time when the matter now forming the solar system extended to those distant regions of space which comets visit.

See, then, how differently this class of phenomena bears on the antagonistic hypothesis. To the hypothesis commonly received comets are stumbling-blocks: why there should be several hundred masses of extremely rare æriform substance rushing to and fro round the sun, it can not say; any more than it can explain their physical constitutions, their various and eccentric movements, or their distribution. The hypothesis of evolution, on the other hand, not only allows of the general answer, that they are minor results of the genetic process; but also furnishes us with feasible explanations of their several peculiarities.

* It is alike remarkable and suggestive, that a parallel relation subsists between the distribution of nebulae and the axis of our galaxy. Just as comets are abundant around the poles of our solar system, and rare in the neighborhood of its plane; so are nebulae abundant around the poles of our sidereal system, and rare in the neighborhood of its plane.

FORMATION OF THE SOLAR SYSTEM.

And now, leaving these erratic bodies, let us turn to the more familiar and important members of the solar system. It was the remarkable harmony subsisting among their movements which first made Laplace conceive that the sun, planets, and satellites had resulted from a common genetic process. As Sir William Herschel, by his observations on the nebulae, was led to the conclusion that stars resulted from the aggregation of diffused matter; so Laplace, by his observations on the structure of the solar system, was led to the conclusion that only by the rotation of aggregating matter were its peculiarities to be explained. In his "Exposition du Système du Monde," he enumerates as the leading evidences of evolution: 1. The movements of the planets in the same direction and almost in the same plane; 2. The movements of the satellites in the same direction as those of the planets; 3. The movement of rotation of these various bodies and of the sun in the same direction as the orbital motions, and in planes little different; 4. The small eccentricity of the orbits of the planets and satellites, as contrasted with the great eccentricity of the cometary orbits. And the probability that these harmonious movements had a common cause, he calculates as two hundred thousand millions to one. Observe that this immense preponderance of probabilities does not point to a common cause under the form ordinarily conceived—an Invisible Power working after the method of "a Great Artificer;" but to an Invisible Power working after the method of evolution. For though the supporters of the common hypothesis may argue that it was necessary for the sake of stability that the planets should go round the sun in the same direction and nearly in one plane, they can not thus account for the direction of the axial motions. The mechanical equilibrium would not have been at all interfered with had the sun been without any rotary movement; or had he revolved on his axis in a direction opposite to that in which the planets go round him; or in a direction at right angles to the plane of their orbits. With equal safety the motion of the Moon round the Earth might have been the reverse of the Earth's motion round its axis; or the motion of Jupiter's satellites might similarly have been at

variance with his axial motion; or that of Saturn's satellites with his. As, however, none of these alternatives have been followed, the uniformity must be considered, in this case as in all others, evidence of subordination to some general law—implies what we call natural causation as distinguished from arbitrary arrangement.

Hence, as we argued at the outset from the general analogies of creation, so here we must argue from the conspicuous characteristics of the solar system itself, that the hypothesis of evolution would be the only probable one, even in the absence of any clue to the particular mode of evolution. But when we have, propounded by a mathematician whose authority is greater than that of any other, a definite theory of evolution based upon established mechanical laws, which accounts for these various peculiarities, as well as for many minor ones, the conclusion that the solar system *was* thus evolved becomes almost irresistible.

The general nature of Laplace's theory scarcely needs stating. Books of popular astronomy have familiarized even unscientific readers with his conceptions; namely, that the matter now condensed into the solar system once formed a vast rotating spheroid of extreme rarity extending beyond the orbit of Neptune; that as it contracted its rate of rotation necessarily increased; that by augmenting centrifugal force its equatorial zone was from time to time prevented from following any further the concentrating mass, and so remained behind as a revolving ring; that each of the revolving rings thus periodically detached eventually became ruptured at its weakest point, and, contracting upon itself, gradually aggregated into a rotating mass; that this, like the parent mass, increased in rapidity of rotation as it decreased in size, and, where the centrifugal force was sufficient, similarly threw off rings, which finally collapsed into rotating spheroids; and that thus out of these primary and secondary rings there arose planets and their satellites, while from the central mass there resulted the sun. Moreover, it is tolerably well known that this *à priori* reasoning is in harmony with the results of experiment. Dr. Plateau has shown that when a mass of fluid is, as far as may be, protected from the action of external forces, it will if made to rotate with adequate velocity, form detached

rings; and that these rings will break up into spheroids which turn on their axes in the same direction with the central mass. Thus, giving the original nebula, which, acquiring a vortical motion in the way we have explained, has at length concentrated into a vast spheroid of æriform matter moving round its axis—given this, and known mechanical laws explain the rest. The genesis of a solar system displaying movements like those which we observe, may be predicted; and the reasoning on which the prediction is based is countenanced by experiment.

But now let us inquire whether, besides these most conspicuous peculiarities of the solar system, sundry minor ones are not similarly explicable. Take first the relative velocities of the planets in their orbits.

If it be true that each planet was formed by the collapse of a ring originally detached from the outside of the concentrating solar mass, then it follows that the revolution of this ring, or the resulting planet, must be performed in the same time as was that of the solar mass at the epoch when the ring was detached. Now between the motion which the solar mass has at present and that which it had during each phase of its concentration, there exists a necessary relation; and it becomes a question whether from its present rate of rotation inferences can be drawn respecting its rates of rotation at the successive periods when the planetary rings were formed. The possibility of drawing such inferences was suspected by M. Comte; and in a paper read before the French Academy he propounded a mathematical formula, which gives results very nearly approaching to the facts. For the sun's axial rotation at the epoch when its matter filled the Earth's orbit the calculated time thus obtained was 357 days—a tolerable approximation to our year. The moon's revolution was found to differ from that which the theory indicated by two and a half hours only. And similarly in the other cases: the amount of disagreement increasing with the remoter planets, but not on the average exceeding one forty-fifth of the period.

We believe that some doubts have been cast upon M. Comte's reasonings; and it must be admitted that the problem has sundry complexities which would seem to make the resolution of it very difficult. However, as a professor of mathematics,

his authority is of weight; and the mere fact that any formula should have given results so nearly corresponding with those of observation throughout a considerable range of cases, is startling and significant.

Another trait in the mechanical arrangements of the solar system which has a manifest bearing on our argument, is the relation between the planes of the planetary orbits and that of the sun's equator. If when the nebulous spheroid extended beyond the orbit of Neptune, all parts of it had been revolving exactly in the same plane, or rather in parallel planes — if all its parts had had one axis — then the planes of the successive rings would have been identical with each other and with that of the sun's rotation. But it needs only to go back to the earlier stages of the concentrating mass, to see that there could exist no such complete uniformity of motion. The flocculi, a while since described as precipitated from an irregular and widely-diffused nebula, and as starting from all points to their common center of gravity, must move not in one plane but in innumerable planes cutting each other at all angles. The vortical motion ultimately resulting, which we at present see displayed in the spiral nebule, must establish itself in one plane — the plane of greatest momentum. All the flocculi not moving in this plane, but entering into the central aggregation at various inclinations, will tend to perform their revolutions round its center in their own planes: and only in course of time will their motions be partly destroyed by conflicting ones, and partly resolved into the general motion. Especially will the outermost portions of the rotating mass ultimately formed, retain for long time their more or less independent directions; seeing that neither by friction nor by the central forces will they be so much restrained. Hence the probabilities are that the planes of the rings first detached will differ considerably from the average plane of the mass, while the planes of those detached latest will differ from it but little. Here again inference agrees with observation. The angle which Mercury's orbit makes with the equator of the Sun is but twenty minutes, or one third of a degree. That made by the orbit of Venus is very nearly four degrees. That made by the orbit of the Earth is seven degrees twenty minutes. And the outer planetary orbits

make angles differing from that made by the Earth's orbit one or two degrees. This, then, is another peculiarity which on the nebular hypothesis has a meaning, but otherwise has none.

Consider next the movements of the planets on their axes. The fact mentioned by Laplace as one among other evidences of a common genetic cause, that the planets rotate in a direction the same as that in which they go round the sun, and on axes approximately perpendicular to their orbits, has, since he wrote, been contradicted in the case of Uranus, and still more recently in the case of Neptune — judging at least from the motions of their respective satellites. This anomaly has been thought to throw considerable doubt upon his speculation; and at first sight it does so. But a little reflection will, we believe, show that the difficulty is by no means an insurmountable one; and that Laplace simply went too far in putting down as a certain result of nebular genesis, what is, in some instances, only a probable result. The cause he pointed out as determining the direction of rotation, is the greater absolute velocity of the outer part of the detached ring. But there are conditions under which this difference of velocity may be relatively insignificant, even if it exists; and others in which, though existing to a considerable extent, it will not suffice to determine the direction of rotation. Note, in the first place, that in virtue of their origin, the different strata of a concentrating nebulous spheroid, will be very unlikely to move with the same angular velocities: only by mutual friction continued for an indefinite time will their angular velocities be made uniform; and especially will the outermost strata, for reasons just now assigned, maintain for the longest time their differences of movement. Hence, it is possible that in the rings first detached the greater absolute velocity of the outer rims may not hold; and not holding, the resulting planet may have a retrograde rotation. Again, the sectional form of the ring is a circumstance of moment; and this form must have differed more or less in every case. To make this clear, some illustration will be necessary. Suppose we take an orange, and, assuming the marks of the stalk and the calyx to represent the poles, cut off round the line of the equator a strip of peel. This strip of peel, if

placed on the table with its ends meeting, will make a ring shaped like the hoop of a barrel—a ring whose thickness in the line of its diameter is very small, but whose width in a direction perpendicular to its diameter is considerable. Suppose, now, that in place of an orange, which is a spheroid of very slight oblateness, we take a spheroid of very great oblateness, having a shape somewhat like that of a lens of small convexity. If from the edge or equator of this lens-shaped spheroid, a ring of moderate size were cut off, it would be unlike the previous one in this respect, that its greatest thickness would be in the line of its diameter, and not in a line at right angles to its diameter: it would be a ring shaped somewhat like a quoit, only far more slender. That is to say, according to the oblateness of a rotating spheroid, the detached ring may be either a hoop-shaped ring or a quoit-shaped ring. One further fact must be noted. In a much flattened or lense-shaped spheroid, the form of the ring will vary with its bulk. A very slender ring, taking off just the equatorial surface, will be hoop-shaped; while a tolerably massive ring, trenching appreciably upon the diameter of the spheroid, will be quoit-shaped. Thus, then, according to the oblateness of the spheroid and the bulkiness of the detached ring, will the greatest thickness of that ring be in the direction of its plane, or in a direction perpendicular to its plane. But this circumstance must greatly affect the rotation of the resulting planet. In a decidedly hoop-shaped nebulous ring, the differences of velocity between the inner and outer surfaces will, in the first place, be very small. In the second place, such a ring aggregating into a mass whose greatest diameter is at right angles to the plane of the orbit, that mass will have a strong tendency to rotate in a direction at right angles to the plane of the orbit; and this tendency will establish itself with but slight modification. Where the ring is but little hoop-shaped, and the difference of the inner and outer velocities also greater, as it must be, the opposing tendencies—one to produce rotation in the plane of the orbit, and the other rotation perpendicular to it—will both be influential, and an intermediate plane of rotation will be taken up. While, if the nebulous ring is decidedly quoit-shaped, and therefore aggre-

gates into a mass whose greatest dimension lies in the plane of the orbit, both tendencies will conspire to produce rotation in that plane.

On referring to the facts, we find them, as far as can be judged without exact mathematical investigation, quite in harmony with this view. Considering the enormous circumference of Uranus' orbit, and his comparatively small mass, we may conclude that the ring from which he resulted was comparatively slender, and therefore a hoop-shaped one: especially if the nebulous mass was at that time less oblate, which is highly probable. Hence, a plane of rotation nearly perpendicular to his orbit, and a direction of rotation having no reference to his orbital movement. Saturn has a mass seven times as great, and an orbit of less than half the diameter; whence it follows that his genetic ring, having less than half the circumference, and less than half the vertical thickness, (the spheroid being then certainly *as* oblate if not *more* oblate,) must have had considerably greater width—must have been less hoop-shaped, and more approaching to the quoit-shaped; notwithstanding difference of density, it must have been at least two or three times as broad in the line of its plane. Consequently, Saturn has a rotatory movement in the same direction as the movement of translation, and in a plane differing from it by thirty degrees only. In the case of Jupiter, again, whose mass is three and a half times that of Saturn, and whose orbit is little more than half the size, the genetic ring must, for the like reasons, have been still broader—decidedly quoit-shaped, we may say; and there hence resulted a planet whose plane of rotation differs from that of his orbit by scarcely more than three degrees. Once more, considering the comparative insignificance of Mars, Earth, Venus, and Mercury, it follows that the diminishing circumferences of the rings not sufficing to account for the smallness of resulting masses, the rings must have been slender ones—must have again approximated to the hoop-shaped; and thus it happens that the planes of rotation again diverge more or less widely from those of the orbits. Taking into account the varying oblateness of the original spheroid in the successive stages of its concentration, and the different proportions of the detached

rings, it seems to us that the respective rotatory motions may be satisfactorily accounted for.

Not only the directions, but also the velocities of rotation are thus explicable. It might naturally be supposed that the large planets would revolve on their axes more slowly than the small ones; this would be most in conformity with our ordinary experiences. It is a corollary from the nebular hypothesis, however, more especially when interpreted as above, that while large planets should rotate rapidly, small ones should rotate slowly; and we find that in fact they do so. Other things equal, a concentrating nebulous mass that is diffused through a wide space, and whose outer parts have, therefore, to travel from a great distance to the common centre of gravity, will acquire a high axial velocity in the course of its aggregation; and conversely with a small mass. Still more marked will be the difference where the form of the genetic ring conspires to increase the rate of rotation. Other things equal, a genetic ring that is broadest in the direction of its plane will produce a mass rotating faster than one that is broadest at right angles to its plane; and if the ring is absolutely as well as relatively broad, the rotation will be very rapid. These conditions were, as we saw, fulfilled in the case of Jupiter; and Jupiter goes round his axis in less than ten hours. Saturn, in whose case, as above explained, the conditions were manifestly less favorable to rapid rotation, takes ten hours and a half. While Mars, Earth, Venus, and Mercury, whose rings must have been slender, take more than double the time: the smallest taking the longest. Not only thus do the various phenomena of rotation consist with the nebular hypothesis, but this hypothesis gives us a more or less feasible solution of sundry peculiarities that, in its absence, are either anomalous or meaningless.

THE SATELLITES.

From the planets, let us now pass to the satellites. Here, beyond the conspicuous facts commonly adverted to, that they go round their primaries in the same directions that these turn on their axes, in planes diverging but little from their equators, and in orbits nearly circular, there are several significant traits that must not be passed over.

One of them is, that each set of satel-

lites repeats in miniature the relations of the planets to the sun, not only in the respects just named, but also in the order of their sizes. On progressing from the outside of the solar system to its center, we see that there are four large external planets and four internal ones, which are comparatively small. The same contrast holds between the outer and inner satellites in every case. Among the four satellites of Jupiter, the parallel is maintained as well as the comparative smallness of the number allows: the two outer ones are the largest, and the two inner ones the smallest. According to the most recent observations made by Mr. Lassell, the like is true of the four satellites of Uranus. In the case of Saturn, who has eight secondary planets revolving round him, the likeness is still more close in arrangement as in number: the three outer satellites are large, the inner ones small; and the contrasts of size are here much greater between the largest, which is nearly as big as Mars, and the smallest, which is with difficulty discovered even by the best telescopes. Moreover, the analogy does not end here. Just as with the planets, there is at first a general increase of size on traveling inwards from Neptune and Uranus, which do not differ very widely, to Saturn, which is much larger, and to Jupiter, which is the largest; so of the eight satellites of Saturn, the largest is not the outermost, but the outermost save two; so of Jupiter's four secondaries, the largest is the most remote but one. Now these analogies are inexplicable upon the theory of final causes. For purposes of lighting, if this be the presumed object of these attendant bodies, it would have been far better had the larger been the nearer: at present their remoteness renders them of less service than the smallest. To the nebular hypothesis, however, these analogies give further support. They show the action of a common physical cause. They imply a *law* of genesis, holding in the secondary systems as in the primary system.

Still more instructive shall we find the distribution of the satellites—their absence in some instances, and their presence in other instances, in smaller or greater numbers. The argument from design fails to account for this distribution. Supposing it be granted that planets nearer the Sun than ourselves, have

no need of moons (though, considering that their nights are as dark, and, relatively to their brilliant days, even darker than ours, the need seems quite as great)—supposing this be granted; what is to be said of Mars, which, placed half as far again from the Sun as we are, has yet no moon? Or again, how are we to explain the fact that Uranus has but half as many moons as Saturn, though he is at double the distance? While, however, the current presumption is untenable, the nebular hypothesis furnishes us with a quite satisfactory explanation. It actually enables us to predict, by a not very complex calculation, where satellites will be abundant and where they will be absent. The reasoning is as follows:

In a rotating nebulous spheroid that is concentrating into a planet, there are at work two antagonist mechanical tendencies—the centripetal and the centrifugal. While the force of gravitation draws all the atoms of the spheroid together, their tangential momentum is, in part, resolvable into a force impelling them to fly asunder. The ratio which these opposing tendencies bear to each other, differs according to the velocity of rotation. In a mass that has no rotation there is no centrifugal force. Conversely when the velocity at which a mass rotates exceeds a certain point, the centrifugal force becomes so great that, overcoming not only the gravitation, but the cohesive attraction, it causes the mass to fly to pieces. And between these extremes, the ratio which the centrifugal force bears to gravitation varies, other things equal, as the square of the velocity. Hence, the aggregation of a rotating nebulous spheroid will be more or less strongly opposed by this outward impetus of its particles: the opposition, in equal spheroids, being four times as great when the rotation is twice as rapid;

nine times as great when it is three times as rapid; and so on. Now the detachment of a ring from a planet-forming body of nebulous matter, implies that at its equatorial zone the centrifugal force has become so great as to balance gravity. If the rotation is very rapid, further concentration, leading to increased rapidity of rotation, will soon again raise the centrifugal force to an equality with gravity—will soon again cause the detachment of a ring. That is to say, the detachment of rings will be most frequent from those masses in which the centrifugal tendency bears the greatest ratio to the gravitative tendency. Though it is not possible to calculate what were the proportions these two tendencies had to each other in the genetic spheroid which produced each planet, it is possible to calculate where they were the greatest and where the least. While it is true that the ratio which centrifugal force now bears to gravity at the equator of each planet, differs widely from that which it bore during the earlier stages of concentration; and while it is true that this change in the ratio, depending on the degree of contraction each planet has undergone, has in no two cases been the same; yet we may safely conclude that where the ratio is still the greatest, it has been the greatest from the beginning. The satellite-forming tendency which each planet had, will be approximately indicated by the proportion now existing in it between the aggregating power and the power that has opposed aggregation. On making the requisite calculations, we find that the facts completely harmonize with this inference. The following table shows what fraction the centrifugal is of the centripetal force in every case, and the relation which that fraction has to the number of satellites.

Mercury.	Venus.	Earth.	Mars.	Jupiter.	Saturn.	Uranus.
1	1	1	1	1	1	1
362	282	289	326	14	6.2	9
		1		4	8	4 (or 6 according to Herschel.)
		Satellite.		Satellites.	Satellites and three rings.	

Thus, taking as our standard of comparison the Earth with its one moon, we see that Mercury and Mars, in which the centrifugal force is relatively less, have no moons. Jupiter, in which it is far greater, has four moons. Uranus, in

which it is greater still, has certainly four, and probably more than four. Saturn, in which it is the greatest, being nearly one sixth of gravity, has, including his rings, eleven attendants. The only instance in which there is imperfect con-

formity with observation is that of Venus. In Venus, it appears that the centrifugal force is relatively a very little greater than in the Earth; and according to the hypothesis it ought, therefore, to have a satellite. Of this seeming anomaly there are two explanations. In the first place, not a few astronomers have asserted that Venus *has* a satellite. Cassini, Short, Montaigne of Limoges, Roedkier, and Montbarron, professed to have seen it; and Lambert calculated its elements. Should it, however, ultimately be proved that they were mistaken, there is still the fact, that the diameter of Venus is variously estimated; and that a very small change in the data would make the fraction less instead of greater than that of the Earth. This seeming discrepancy, then, slight as it is, is very probably not real; and if it is not real, the correspondence between calculation and fact is complete. We can not but think that this correspondence, even as it now stands, is one of the strongest confirmations of the nebular hypothesis.

Certain more special peculiarities of the satellites must be mentioned as highly suggestive. One of them is the relation between the period of revolution and that of rotation. No discoverable purpose is served by making the Moon go round its axis in the same time that it goes round the Earth: for our convenience a more rapid axial motion would have been equally good; and for any possible inhabitants of the Moon, much better.

Against the alternative supposition, that the equality occurred by accident, the probabilities are, as Laplace says, infinity to one. But to this arrangement, which is explicable neither as the result of design nor of chance, the nebular hypothesis furnishes a clue. In his "Exposition du Systeme du Monde," Laplace shows, by reasoning too detailed to be here repeated, that under the circumstances such a relation of movements would be likely to establish itself; and he further shows that there would, from the same causes, result that lateral oscillation of the moon known as its libration.

Among Jupiter's satellites, which severally display these same synchronous movements, there also exists a still more remarkable relation. "If the mean angular velocity of the first satellite be added to twice that of the third, the sum will be equal to three times that of the second;" and "from this it results that the situations of any two of them being given, that of the third can be found." Now here, as before, no conceivable advantage results. Neither in this case can the connection have been accidental: the probabilities are infinity to one to the contrary. But again, according to Laplace, the nebular hypothesis supplies a solution. Are not these significant facts?

CONCLUDED IN NEXT NUMBER.

SUB-TITLES AND TOPICS.—Saturn's Rings—Densities of Sun and Planets—The Earth once liquid—An exploded Planet—Temperatures of the Sun and Planets—Hurricanes in the Sun, etc.

From the Critic.

THE THREE CALLERS.

Morn calleth to a fair boy straying

'Mid golden meadows rich with clover dew;
She calls—but he still thinks of naught save
playing;

And so she smiles—and waves him an adieu!
Whilst he still merry with his flowery store,
Deems not that Morn, sweet Morn! returns
no more.

Noon cometh—but the boy, to manhood grow-
ing,

Heeds not the time—he sees but one sweet
form,

One young fair face, from bower of jasmine
glowing,

And all his loving heart with bliss is warm.
So Noon, unnoticed, seeks the western shore,
And man forgets that Noon returns no more.

Night tappeth gently at a casement gleaming
With the thin fire-light, flick'ring faint and
low;

By which a gray-haired man is sadly dreaming
O'er pleasures gone, as all Life's pleasures go:
Night calls him to her—and he leaves his door,
Silent and dark: and he returns no more.

From the Dublin University Magazine.

A GERMAN LEGEND.

BY JONATHAN FREKE SLINGSBY.

"Art thou sleeping, O my mother!
Outworn with grief at last?
To speak to thee, sweet mother,
From the grave-yard have I past.

"I can not rest in quiet,
Though my grave is dark and still;
For a cold air creeps around me,
And my shroud is damp and chill."

Up rose that mother lonely,
The ghost-dream in her brain—
With the spirit-sight she seeth
Her little child again.

A vapory flame, like moonlight
When muffled by a cloud,
Wraps the baby as she standeth
By the bed-side in her shroud.

"Creep, darling, to my bosom,
And lay thine heart on mine;
Its throbbing blood shall warm thee:
I'll give my life for thine."

"Oh! never more, sweet mother,
May I lie upon thy breast,
But from my grave I come to crave
That thou wilt give me rest.

"All day and night so dreary
I hear thy moaning still,
And thy deep sighs breathing o'er me,
Mother, they make me chill.

"All day and night so dreary
Thy tears soak through the mould,
And on my shroud come trickling—
They make me damp and cold."

Oh! great love, self-denying!
The mother hides her woes
Within her aching bosom,
To give her child repose.

Soft fades that pale, cold vapor,
As boreal lights at night;

And the little babe so fades away
From the mother's straining sight.

And ever through the lone night
That mother watched in vain
For the spirit of her lost one
To stand by her again.

And ever, when the grief-drops
From her fountain-heart would rise,
She crushed them ere they trickled
In tear-rain from her eyes.

And ever, when the wailing
Of sighs rose in her breast,
She choked it back—to break her heart,
But not her loved one's rest.

Now, when a moon had circled,
Lo! in the solemn night
Came a vision to that mother,
Filling the room with light.

And a voice, like trickling waters,
So soft, so sweet, so clear,
Floods all the dreamy silence
And fills the mother's ear:

"Sleep on, thou patient mother,
No more with grief oppressed,
Untroubled now, and sweetly,
Thy little one takes rest.

"He that forever giveth
Rest to his children dear,
Sendeth to thee this vision
Thy loving heart to cheer."

Awoke that mother lonely,
As passed the voice and light;
But she knew who stood in glory
Beside her bed that night.

The angel of her little child
The message blessed had given—
One of the angels that behold
The Father's face in heaven.

From the Eclectic Review.

ULRICH VON HÜTTEN:

THE SECOND LUTHER OF GERMANY.

MORE than three centuries have rolled away since a noble Franconian knight was buried in the green island of Uffnau, which lies at the extremity of the Lake of Zurich, almost within the shadow of the lofty Alps. That knight was Ulrich von Hütten, who died at the early age of thirty-six, forsaken by his friends, persecuted, destitute; but who, in the course of his short and brilliant career, did more than any man of his time, with the single exception of Luther, to liberate Germany from the tyranny of the Papal yoke. He also took a prominent part in forwarding the cause of classical learning, and in emancipating the world of mind from the iron bondage in which it had for ages been bound, by the false teaching and useless subtleties of the scholastic system. All this he did, in spite of poverty, persecution, and disease, by the power of his eloquent and spirit-stirring writings, which, in a literary point of view, are honorable to the age in which they appeared; which produced an unparalleled effect upon the German mind, and which—even at the present day—are deeply interesting; not only as exhibiting noble and liberal views of politics and religion, far in advance of their age, and as containing the most cutting and effective satires that have ever been penned against the vices and corruptions of the monastic system and of the court of Rome; but, also, as presenting the most vivid and faithful pictures of the age in which they appeared, in its varied forms of life and action.

As the very name of Ulrich von Hütten is far less generally known in this country than it deserves to be, and as his works are but little read, we propose, in the present article, to present our readers

with a sketch of his life, and a brief account of some of his most celebrated writings. The subject is one of great interest; for few historical characters exhibit more originality than that of Hütten. One of the representative men of his age and nation, he unites in himself some of their noblest features. Born at a crisis when the European mind, stirred to its foundations, was straining after a freer and nobler life, but a life as yet imperfectly conceived and comprehended, he became one of the most energetic exponents of the wants and aspirations of his time, and one of the most powerful agents in giving these aspirations a definite form, and removing the obstacles that prevented their fulfillment. A worthy fellow-worker with Luther, he seconded him in all his efforts for religious freedom; inspired with the warmest and most disinterested love of liberty, he was, throughout life, her most eloquent defender, and, at last, died a martyr in her cause. Seldom, indeed, has she had a nobler champion; he offered her no mere lip-homage, but acts and those burning words that rouse others to action. His exertions were unceasing; his activity of thought prodigious, and his productiveness no less remarkable. During his short life he composed not fewer than fifty separate works, one of which still ranks as the national satire of Germany. Among them are editions of the classics, treatises on a variety of subjects, many of them poetical, orations, and letters. Most of them, however, are satires. Satire and invective were, indeed, at that time the prevalent modes of writing in Germany, as a glance at the literature of the age will show, and Hütten was led to adopt them, both by the force of circumstances, and by the character of his genius. He pursued them with his usual impetuosity and ardor, and is often to blame for his violence and want of delicacy; but, in spite of these faults—which, indeed, deform

* *Études sur les Réformateurs du Seizième Siècle. Ulrich de Hütten.* Par V. Chausfour-Kestner. Paris: Charles Hingray, Libraire-Éditeur. 1853.

the writing of the greatest men of that age—we are always obliged to admire his zeal for truth, his profound detestation of hypocrisy, and his ardent love for liberty and for his native country.

Ulrich von Hütten was born on the 21st April, 1488, at the family Château of Steckelberg in Franconia. From the tenth century, his ancestors had borne an honorable name in council and in war; and held a high place among that Franconian nobility which was regarded as the most perfect type of German chivalry. Ulrich's birthplace was one of those feudal residences of which he has left us the following vivid description:

"Our châteaux are constructed not for pleasure, but security. All is sacrificed to the necessity of defense. They are inclosed within ramparts and ditches; guard-rooms and stables usurp the place of apartments. Every where the smell of powder, of horses, of cattle, the noise of dogs and oxen; and, upon the skirts of the great forests that surround us, the howling of wolves. Perpetual agitation; constant coming and going; while our gates, open to all, frequently admit cut-throats, assassins, and thieves. Each day brings a new anxiety. If we maintain our independence, we run the risk of being crushed by two powerful enemies; if we put ourselves under the protection of some prince, we are forced to espouse all his quarrels. We can not sally forth without an escort. To go to the chase, to pay a visit to a neighbor, we must put casque on head and cuirass on breast. Always, every where, war."

Some leagues from the Château of Steckelberg stood the Abbey of Fulda, an ancient monastic institution founded under the auspices of Charlemagne in the beginning of the ninth century. Its school was famous; and to it Ulrich was sent when eleven years of age. He was the eldest of four children, but, being of feeble constitution and delicate frame, his parents imagined that he would find the Church an easier road to preferment than the army. At Fulda, Hütten applied himself, with characteristic ardor, especially to the study of the classical tongues; but for a monastic life he showed no vocation, and was encouraged in his dislike to it by his fellow-pupil Crotus Rubianus, and by Ethelwolf von Stein, who proved a powerful and steady friend. All the representations of the latter, however, to the parents of Hütten were ineffectual; for the abbot of Fulda had discovered the splendid abilities of the youthful student,

and wished to enlist them in the service of the Church. The result was, that finding it impossible to submit to the wishes of his parents and the abbot, Hütten fled from Fulda, and, at the age of sixteen, threw himself upon the world to fight the great battle of life. For a long time after this period he was dead to his family, his father taking no notice of him, and contributing nothing to his support.

On leaving the Abbey of Fulda, Hütten repaired to Erfurth and afterwards to Cologne, where his friend Crotus Rubianus soon joined him. Cologne was the most ancient and distinguished of the German universities; but scholasticism still reigned there in full vigor, and the science of dialectics was made the first object of Hütten's studies. He soon, however, tired of the fruitless subtleties and logical quibbles of the schoolmen, and betook himself to the more congenial study of the classics. He was the assiduous and favorite pupil of Ragius Esticampius, who, in the face of the old system, taught with the greatest success the new science of the ancient languages and literature. The time was fast approaching when the human mind was to emancipate itself from the fetters of scholasticism; and, as a preparation for the coming struggle for freedom and progress, the models of classic antiquity were eagerly studied. A great literary movement had been gradually developing itself in Germany from the beginning of the sixteenth century. In 1503 a society was formed on the borders of the Rhine, under the name of "Sodalitas Litteraria Rhenana," and met with great encouragement from the fostering patronage of the princes of the Palatinate. Its members did much to forward the good cause; but the old system was not to be overthrown without a struggle, and, in Germany, the universities proved themselves the most strenuous supporters of the cause of ignorance, and the most bitter persecutors of the partisans of the new teaching. Like the accusers of Socrates, like the upholders of all ancient abuses, the theologians of Cologne brought against Ragius the accusation of being an innovator, and a corrupter of youth, and expelled him from their university; upon which he betook himself to Frankfort, where the Margrave of Brandenburg was about to found a university, and there he was speedily followed by Hütten, who was received as one of the earliest masters,

and repaid his reception by his first poem.

From 1506 to 1514, Hütten only appears at long intervals. He seems to have traveled extensively in order to add to his knowledge, visiting Bohemia, Moravia, Vienna, and many other parts of the north of Europe. During these travels, undertaken almost without resources, he frequently suffered much distress and hardship. On the Baltic he was exposed to the fury of a terrible tempest, and in Pomerania he was plundered of his baggage. Occasionally, however, the charms of his conversation procured him a flattering reception, as at Olmutz, where the bishop, after having hospitably entertained him for several days, gave him at his departure a horse and a purse of gold. In 1512 we find him at Pavia, where the French were besieged by the Swiss. His sojourn there was a succession of mishaps. He had a quarrel with some of the soldiers of the garrison, and was regularly besieged by them in his lodgings. He gave himself up for lost, and, in order to die as became a poet, composed his own epitaph, which is very beautiful. The town, however, was at length taken by the Swiss, and Ulrich thought his troubles and dangers over; but his captors, pretending to take him for a German in the service of France, maltreated and plundered him, so that he was glad to escape with life from their hands. He found a refuge at Bologna, but here his resources entirely failed, and he was obliged to enlist as a private soldier in the army of the Emperor Maximilian.

On his return to Germany, his friend Ethelwolf von Stein recommended him to the Archbishop of Mayence, who received and treated him as a friend, and in his honor he composed one of his most elegant Latin poems, which he was only persuaded to publish at the instance of his patron. His dislike to its publication is thus accounted for by himself:

"You are acquainted with the ideas and manners of the German nobles; one would take them for centaurs rather than for knights. If a young man applies himself to study, they point the finger of scorn at him as a degenerate being, a disgrace to his family and to nobility. Thus many who were on the high road to learning have turned back, and bowed the neck to the yoke of prejudice. Are not we condemned each day to hear these centaurs boast that they are the pillars of the country, that in them alone is

true nobility, and that they alone are fit for great enterprises both in peace and war!"

This expression of Hütten's sense of the degradation of the German nobility, is often repeated in his writings, where he reproaches them with coarseness, drunkenness, and contempt for the arts and sciences; and one of his designs was to combat and destroy that prejudice which considered the cultivation of letters a mark of base birth. Yet with all his appreciation of the silly and narrow prejudices of the German nobles, Hütten himself was sufficiently proud of his own high birth, which he shows with great *naïveté* in a letter to his friend Piscator, requesting him to choose a wife for him. "Give me a wife," he says, "young, handsome, well-educated, gay, virtuous, patient, and possessed of a moderate fortune. I do not look for riches; and, as to birth, she will always be sufficiently noble if she is the wife of Hütten."

Hütten was now about to commence his work, for which he possessed every requisite; for not only was he an admirable scholar and elegant poet, but his travels had given him the great gift of experience. He had examined the world close at hand, and knew its passions, its needs, its vices, its aspirations. He knew that it was in a state of agitation, only waiting for an impulse to direct it. He had himself suffered much, and could appeal to all who suffered. He had visited Rome, and studied there the secret corruptions of the Roman tyranny, and knew how to strike at its heart; and the spirit of liberty, strong from his boyhood, had been confirmed, enlarged, and purified by meditation and labor. In person Hütten was short and slight, and his frame was bent by early hardships and disease; but his face was animated, and his eyes brilliant and piercing. His personal character was very amiable, without haughtiness, and full of readiness to oblige women and children, and even the humblest of men; while his conversation was instructive and sparkling, and abounded in sallies of wit. Such was Ulrich von Hütten, when a tragical event plunged him at once into the public strifes of the time, in which the remainder of his life was destined to be spent.

That event was the cowardly assassination of his cousin, the youthful Jean von Hütten, (esteemed the flower of Franconian chivalry,) by the Duke of Wurtemberg.

This crime was the blacker, as, in the peasant war, the Hüttens had brought to the Duke's assistance the Franconian knighthood, and thus secured to him the victory. Jean was the intimate friend and favorite of the Duke, until the latter conceived a guilty passion for the handsome wife of the young knight; to gratify which he invited him to a hunting-party, and, in a retired part of the forest, killed him with his own hand. Universal indignation was excited by this cowardly murder; but the Duke believed himself above vengeance, and lived publicly with the widow of his victim. Ulrich von Hutten was at this time (1515) residing at the Castle of Ems; but when he learned the crime he at once determined to pursue the murderer, and hastened to reconcile himself with his father previously to adopting the vengeance of the family. He employed letters, poems, orations, to arouse Germany against the criminal. He directed against him five Latin harangues in terms full of eloquent indignation. He demanded of the princes of the land that justice should be done upon the guilty, and declared that if they refused, the Hüttens would not hesitate to right themselves. In addition to these orations, Hutten also published a dialogue entitled "*Phalarismus*," which supposes the meeting of Phalaris and the Duke of Wurtemberg in the infernal regions. Phalaris rejoices to see a man his equal in cruelty, and gives him some good lessons in tyranny. These writings created an immense sensation throughout Germany, and Ulrich found himself an important political character. He had, by the force of his eloquence, made his private wrongs a national affair; but the Emperor for a long time hesitated to punish a sovereign prince, and it was not until 1519 that vengeance overtook the Duke. He was then put to the ban of the empire, and driven from his dominions by an army commanded by Franz von Sickingen, and in which Ulrich had the pleasure of serving. This affair had a great influence upon the mind of Hutten; it gave him a deep insight into the politics of Germany, which he had studied from all points, in order to assist him in obtaining justice upon the murderer of his cousin. But the struggle in which Hutten earned his greenest laurels was that waged between the Humanists—as the supporters of classical learning were called—and the Scho-

lastics, or supporters of the old system. This contest, long impending, was at length called into action almost by an accident. Jean Reuchlin, the most learned man in Germany—who had published a Latin dictionary and a Greek grammar—who first in Germany possessed a complete copy of Homer, and first among the learned men of Europe attained a profound acquaintance with the Hebrew language and literature, was the man destined to bring this great struggle to its crisis. A converted Jew, named Pfefferkorn, had published a book in which he accused his former coreligionists of adoring the sun and moon, and of outraging Christ in the most disgraceful manner. This work was welcomed by the theologians of Cologne, and especially by Hochstraten, prior of the Dominicans, and inquisitor for the three ecclesiastical electorates. They insisted that all Jewish books, excepting the Bible, were dangerous and heretical, and demanded from the Emperor that they should be burned. The Emperor remitted the matter to the Archbishop of Mayence, and he naturally consulted Reuchlin, as the best authority upon the subject. Reuchlin decided in favor of the Hebrew books; but his memorial, intended only for the eyes of the Archbishop, was by some means communicated to Pfefferkorn and the theologians of Cologne, whose fanaticism was roused to the highest pitch by the moderation of Reuchlin's memorial. They assailed him with the utmost vehemence in print, to which he made a crushing reply. They retorted, and he wrote a second answer. He was then summoned before the Inquisition, and a variety of procedure took place, which resulted in the whole matter being referred to the Pope, who remitted it, with full powers, to the Bishop of Spire, who decided in favor of Reuchlin, and found his opponents liable in the expenses of the suit. In spite of this, the theologians of Cologne and of the University of Paris burned the writings of Reuchlin; and Hochstraten started for Italy, with a numerous retinue and good store of money, in order to influence the infallible court of Rome.

This controversy called forth a host of publications on each side of the question; and of these by far the most effective was the "*Epistolæ Obscurorum Virorum*," which inflicted the most deadly blow that had ever been dealt against scholasticism, the monastic system, and the Papacy, and

which, in the words of a distinguished writer, "gave the victory to Reuchlin over the begging friars, and to Luther over the court of Rome." Its construction is very simple. Before the commencement of the controversy Reuchlin had published a volume of letters from his correspondents; and Ortunius, an adherent of Hochstraten, and enemy of Reuchlin, is in like manner supposed to print a volume of epistles addressed to him by his friends. The title of Reuchlin's volume is, *Epistolæ Illustrum Virorum ad Reuchlinum, Virum nostræ ætatis Doctissimum*; and Ortunius, in ridicule of this somewhat pompous title, is supposed to entitle his work *Epistolæ Obscurorum Virorum ad Ortunium*. The foes of Reuchlin and of classical learning are thus made to represent themselves. Most of the letters bear to be written by monks and theologians, and a few by medical men and priests. To give greater color and probability to the work, these are written in bad Latin, the usual medium of communication employed by the monks; and the very phrases and idioms familiar to these supporters of scholasticism are most happily introduced. These letters display with the utmost apparent simplicity and candor the secret history of the mendicant orders, their vices, indolence, ignorance, their plots against Reuchlin and the Humanists, and their hatred of all serious and useful instruction. They are made, as it were, to dissect and condemn themselves; to tear the veil from their own follies and vices. The satire is most savage and bitter; no quarter is given, no mercy shown. It struck hard, but it struck home, and never did ridicule more effectually contribute to the service of truth. Such is the apparent seriousness of this the national satire of Germany, that several, even of those against whom it was directed, were deceived by it; so much so, that a prior of a Dominican convent in Brabant bought a number of copies, in order to present to his friends, believing that it had been written in praise of his order.

The monks of Germany were filled with indignation against the epistles and their authors, and applied to the Pope for a bull ordaining the burning both of the satire and the satirists—when they should be found—for the work originally was published anonymously. There is no doubt that Hütten is the author of by far

the greater portion; but some of the letters appear to have been written by his friends, Crotus Rubianus and Hermann Burchius. The first volume of the *Epistolæ Obscurorum Virorum*, appeared in 1516; and another able work, arising out of the same controversy, written before the *Epistolæ Obscurorum Virorum*, but not published until 1519, is the *Triumphus Capinonis*, in which Hütten celebrates in eloquent verse the triumph of Reuchlin over his accusers.

Hütten's extraordinary abilities were not appreciated by his own family. They considered one of the most popular poets and learned men of the day as a disgrace to their nobility. Three courses only were open to him without, in their eyes, soiling his nobility. For one of these—war—his delicate frame unfitted him; for another—the Church—he had early shown an insuperable dislike; the third alone—the law—remained open. Doctors of law often became the counselors and agents of princes; and it was decided by the friends of Hütten that he should again repair to Italy, in order to obtain that legal diploma, which even a noble Franco-German might bear, without detracting from his dignity. He departed unwillingly; but, in deference to the wishes of his friends, applied himself to legal studies with conscientious ardor. But in vain he tried to take an interest in that subtle and perplexing science; and, in some of his subsequent works, he speaks in strong terms of reprobation and dislike of the civilians, and the expense and complication of the system which they had substituted for the old laws and customs of Germany.

During this visit to Italy, Hütten witnessed, with strong indignation, the vices and corruption of the Papal court. Almost all the great men who have seen Papal Rome, during the period of its grandeur, have, however, felt and recorded the same impression; few more strongly than Petrarch. Boccaccio, Luther, Hütten, Montaigne, Rabelais, were all disgusted with the vice, venality, and luxury, which they witnessed. At this period, under Leo X., assassination, the most shameful vices, debauchery of every kind, and unbridled luxury, were rife in Rome; in every relation of public and private life, idleness, ignorance, and bad faith, were commonly practiced; every thing could be bought, even pardon for the

most infamous crimes. Hütten's sentiment of religion was deeply wounded, and his anger strongly excited, and he returned to Germany a determined foe of the Roman see.

During this journey to Italy he had an opportunity of signalizing his personal bravery and skill in the use of the sword. One day, while on the road to Viterbo, he heard five Frenchmen ridiculing Maximilian, the German Emperor, and interfered to defend him. The discussion became warm; words led to blows; swords were drawn, and the five Frenchmen at once threw themselves upon Hütten. He, nothing daunted, received them gallantly—setting his back against a wall to prevent his being surrounded—and succeeded, after a severe conflict, in killing one of their number, and putting the rest to flight. He was finally obliged to leave Italy without the title of doctor of laws; but, instead of this, the Emperor Maximilian—who had heard of his adventures, and of his gallant defense of the imperial honor—made him a knight, and also conferred upon him the title of imperial poet and orator; and, in April, 1517, the laurel crown was placed upon his brows by the beautiful Constance, the daughter of Pentinger, called the Pearl of Augsburg. The diploma, conferring the title of imperial poet and orator, is still preserved, and from this time, Hütten takes the title of "Poëta et Orator," and is represented on the frontispiece of his works in complete armor, and with his brows girt with laurel. At a later period, when he had commenced his attacks upon Rome, his portraits represent him with his hand upon the hilt of his sword, which is half drawn from its sheath.

The honors conferred upon Hütten by the Emperor, produced a complete reconciliation between him and his father; and Hütten became for some time a resident at the Château of Steckelberg. While there, he discovered, in the library of the Abbey of Fulda, a manuscript treatise of Laurentius Valla upon the pretended donation of Constantine to the Roman see. The author had, in the preceding century, been condemned as a heretic, and his book burned. It refutes, with great eloquence and learning, the pretended donation, and Hütten judged that he could not better open the campaign against Rome than by its publication. It was printed at the Château of Steckelberg; and Hütten,

with characteristic audacity, prefixed to it a dedication to Leo X. This work—as we learn from himself—produced a profound impression upon the mind of Luther, and had a great influence in inducing him to break entirely with the court of Rome.

"I have in my hands," he writes to a friend, "the Donation of Constantine, refuted by Laurentius Valla, edited by Hütten. Good God! what ignorance or what perversity in that court of Rome! And how must we wonder at the designs of God, who has permitted that falsehood so impudent, gross, and impure, should prevail during ages, and should be even received in the decretals, and among the articles of faith, that nothing might be a-wanting to the most monstrous of monstrosities. I am so agitated, that I scarcely any longer doubt that the Pope is truly Antichrist. All agrees: what he does, what he says, and what he ordains."

It may be observed, however, that Hütten's decisive attack against Rome was made several years before Luther took any determined step against the Pope; and it is worthy of note, how the writings of Hütten influenced a genius as original and fearless, but more large and genial than his own.

The year 1519 was one of the busiest in Ulrich's life. In that year he published his terrible philippic against the Duke of Wurtemberg, joined the army that was to chase him from his dominions, edited an edition of the works of Livy, fulminated against Rome and her legates three dialogues, full of energy, eloquence, and sarcasm, and dedicated to Ferdinand, brother of the Emperor Charles V., a work upon the quarrel between the Emperor Henry IV. and Pope Gregory VII., which, like the treatise of Laurentius Valla, he had discovered in the library of the Abbey of Fulda. At the same time, he maintained a correspondence with the most distinguished men of his time; many of whom exhorted him to continue his efforts against the corruptions and exactions of Rome. The moment appeared favorable. The powerful Archbishop of Mayence was his protector and friend. Erasmus assured him that Ferdinand, the Emperor's brother, held him in the highest esteem. Sickingen, the representative of German chivalry, offered his services; while the Emperor himself was on bad terms with the Pope, who, in the contest for the German empire, had favored the claims of his rival, Francis I. Hütten did not long

hesitate, but with the war-cry, "Jaeta est alea," (the die is cast,) which afterwards became his motto, threw himself into the van of conflict, and prepared to deal an effective blow against Rome. At the same time, he was well aware of the dangers he must encounter; but in the cause of truth and freedom he was prepared to dare them all. But in order to spare his family from the persecutions which menaced him, he desired his parents to cease all communication with him; and when, on his father's death, the succession to the family estates opened to him, he gave them up to his younger brothers. The latter part of his life is complete self-abnegation.

The blow which Hütten meditated, fell heavily, when he published his *Trias Romana* which was first written in Latin, and afterwards translated into German. This terrible wound still rankles in the side of Rome. The satire represents in the most lively and truthful manner her enormous corruptions, the intolerable exactions and insults to which she had subjected Germany, and the necessity of a complete and violent revolution. Whoever would know to what lengths the Papacy dared to proceed, in the days of our fathers, should read this book. It is in the form of a dialogue, in which the speakers are Hütten himself and his friend Ehrenhold, to whom Hütten recounts what he has been told of the court of Rome by a traveler, named Vadiscus. These recitals take the form of triads, frequently interrupted by the exclamations and reflections of the two friends. Our limits will only permit us to give a very short specimen, which may, however, afford some idea of the character of the work:

"Three things maintain the renown of Rome: the power of the Pope, relics, and indulgences. Three things are brought from Rome by those who go there: a bad conscience, a ruined stomach, an empty purse. Three things are not to be found in Rome: conscience, religion, faith in an oath. At three things the Romans laugh: the probity of their ancestors, the Papacy of St. Peter, the last judgment. Three things abound in Rome: poison, antiquities, empty places. Three things are completely a-wanting: simplicity, moderation, and loyalty. Three things are publicly sold by the Romans: Christ, ecclesiastical dignities, and women. Of three things they have a horror: a general council, Church reformation, and the progress of enlightenment."

The *Trias Romana* created a vast

sensation in Germany, and principally contributed to produce the manifestation of popular opinion against the Papal legates, in 1519 and 1520. "By this pamphlet," says Cochlans, "Hütten has made the name of the Romish court the most odious in Germany." But, at the same time, it roused against its author the formidable wrath of the Papacy; but, ere it burst upon his head, he had gained a new title to it, by the publication, in 1520, of several letters, written by the most famous universities of Europe, as to the best means of putting an end to the schism then existing in the Church. His object in this publication was to show with what freedom and boldness the ancient universities had written concerning the rights of the people, the emperor, general councils, and the unlawful pretensions of the Popes; and thus to excite the emulation of the great seminaries of learning in his own time. Soon after the publication of these letters, the Archbishop of Mayence received a Papal brief, expressing grief and astonishment, that such works had been suffered by him to be printed within his diocese, and almost under his own eyes; and further exhorting him to punish the impudence of a certain Hütten, that his chastisement might prove a warning and an example to others. Upon this, the Archbishop demanded from Hütten a promise to write nothing farther against the court of Rome, which was promptly refused, and he then forbade the reading of his works, under pain of excommunication.

Hütten, thus deprived of his hopes of finding in the Archbishop a coadjutor in his great work, hastened to put himself in communication with Luther, whose energetic character and language he admired, and in whom he was now ready to recognize the chief of the Reformation. In 1519 he had offered him a safe asylum with Sickingen; and in June, 1520, he wrote to him, exhorting him to be of good cheer, congratulating him on his work, and offering himself as a second to him in all his strifes. It was during this year that Luther burnt the Pope's bull, and published his *Babylonish Captivity*, and *Appeal to the Christian Nobility of the German Nation for the Reformation of the Church*.

After this, Hütten repaired to Brabant, where Ferdinand then held his court, in expectation of the arrival of his brother,

Charles V., who was on a progress through his German dominions. But he soon saw that the Emperor, though elected in spite of the opposition of the Pope, had no intention of quarreling with him, as he might prove useful in his contemplated designs upon Italy. Hütten, therefore, made but a short stay at court, especially as he was warned that the legate had determined to have him removed either by poison or the dagger. He first fled to Mayence, and afterwards to Frankfort, where he learnt that the Pope had written to several princes, and, in particular, to the Archbishop of Mayence, to seize him, and send him a prisoner to Rome. At length the legate required the Emperor to put Hütten to the ban of the empire, and to permit the agents of the Roman court to arrest his person wherever they might meet him. On seeing the perils which thus menaced him, and the danger of lending him any assistance, many of Hutten's friends forsook him; but he himself, far from being discouraged, only became more resolute to defend the truth. His steady friend, Franz von Sickingen, the last representative of the old German chivalry—lion-heart and arm of iron—offered him, in his Château of Ebernbourgh, an impregnable defense against violence; and thence, like Luther afterwards at Wartburgh, he continued to issue works that stirred the German heart. He published letters to the Archbishop of Mayence, to the Knight von Rotenham, and to the Emperor Charles V. In the last of these, he dwells with much strength and eloquence upon the insult offered to the imperial dignity by the pretensions of the Pope to the right of arresting and carrying in chains to Rome a German knight, a member of that body of which Charles was the head. Sickingen sent this letter to the Emperor, but its only effect was a promise that Hütten should not be delivered up to the Papal emissaries, without being brought to trial.

Another letter was written by the reformer to the princes, nobles, and people of Germany; but the most eloquent and important of the series is that addressed to Frederick of Saxony, the resolute protector of Luther, in which the whole controversy between the Pope and the free nobles and people of Germany, is placed in the clear light of justice and liberty. The whole letter is admirable; but we can only give the concluding words:

"And now I fly from cities, because I can not abandon the truth; I live in solitude, because I can not live free in society. For the rest—I despise the dangers which threaten me; for I can die, but I can not be a slave. I can not endure with patience the servitude of my country. But one day, perhaps, I shall sally forth from my retreat, I shall burst into the crowd, and cry to my fellow-citizens: 'Who will live and die with Hütten for liberty?'"

Luther, on sending this letter to Spalatin, to transmit to the Elector, writes: "Good God! what will be the end of all these innovations! I begin to believe that the Papacy, hitherto invincible, will be overthrown, contrary to all expectation, or else the last day approaches."

For a long time Hütten believed that a reformation in Church and State might be brought about in Germany, through the instrumentality of the higher classes alone. But he now found that little dependence was to be placed on the great, who chiefly studied their own selfish ends. He, therefore, determined to address himself to the German people; and, in 1520, published a German translation of his letter to the Elector of Saxony, and shortly afterwards a poem, in German, having for title: "Complaint and Warning against the excessive anti-Christian Power of the Pope, and against the Irreligion of the Religious Orders, written in verse by U. von H., poet and orator, for the benefit of all Christendom, and especially of Germany, his native country. The die is cast. I have dared it." This poem, full of noble thoughts, expressed in eloquent language, and in which the rhyme assisted to fix them in the memory the reader, produced a remarkable effect in Germany. The poorest bought it, the most ignorant could comprehend it; and new editions were called for almost every month.

In the same year, 1520, so fertile in the life of Hütten—so important in the history of the Reformation, Hütten translated into German several of his dialogues, and also his famous *Trias Romana*, and published them with an affecting and manly dedication to Franz von Sickingen, his dear friend and steady protector. The famous Diet of Worms, which soon afterwards took place, exercised a powerful influence upon the tide of events in Germany. It forced what had hitherto been a peaceful movement, which promised to revolutionize Germany by the mere power

of the word, into violent and warlike action. The Emperor believed that the Pope might be useful to him in his designs upon Italy, and therefore sacrificed to him, without a scruple, the cause of liberty, and the hopes of the reformers. Luther was put to the ban of the empire as a member cut off from the Church of God, with all his friends, adherents, and protectors; his writings were ordered to be burnt, and, that none of a similar sort might appear in future, a strict censorship was appointed over the printing officers. The violence of this edict, however, defeated its own ends; for, in spite of the flames and the censorship, the writings of Luther were every where spread abroad. A number of anonymous writers, too, appeared to defend his cause, but Hütten signed his name to the violent diatribe which he fulminated against Alexander, the Papal legate, whose activity and intrigues had been chiefly instrumental in procuring the Edict of Worms. During the sitting of the Diet he published four pamphlets, of which one, called *The Brigands*, discusses the important question of the possibility of a union between the nobles and the mass of the people, seeing that there was no longer any hope from the Emperor, and that the princes were indifferent, timid, or gained over by the Pope.

Charles V., after having sacrificed Luther to the Pope, in order to make an enemy the more to his political rival, Francis I., tried to enlist in his service the talents of Sickingen, and the energy and eloquence of Hütten; and, with the view of gaining them over, sent his confessor, Glapion, to the Château of Ebernbourg. Of this man Hütten declares: "Never was there a greater hypocrite; every thing in him deceives—face, eyes, mouth, speech, gestures. He accommodates himself to all situations, and changes along with circumstances." This cunning ambassador won over the two friends, probably by holding out to them the prospect of ultimately gaining the support of the Emperor to their views. Sickingen raised an army of 3000 cavalry, and 12,000 foot, intending to penetrate by a bold march into the heart of France; but the Count of Nassau, who was general, insisted upon first besieging Mezières. This was defended by the famous Bayard, and then the two model knights of Germany and France found themselves opposed.

The result was, that the imperialists were repulsed and obliged to retire, and Sickingen, besides his other losses, lost the hope of attaching the Emperor by gratitude for his services.

Soon after this, Sickingen and Hütten, at the head of the knights of the Rhine, commenced the war against the priests; and, to further the cause of the confederates, Hütten again took up his powerful pen, and again assailed the pride, avarice, indolence, and grinding exactions of the Roman Catholic priesthood. The campaign of this, the first war of the Reformation, opened by an attack against the Bishop of Trèves. Sickingen, however, was defeated by the Bishop and his allies, the châteaux of his friends and adherents successively taken and destroyed; and he himself, hotly pursued, separated from Hütten, shut himself in his Château of Landsfelt, determined to fight to the last, and there he found a soldier's death among the ruins of his castle.

Hütten now found himself compelled to fly from Germany, and seek a refuge in Switzerland. Entirely devoid of resources by means of his generous abandonment of his patrimony, driven from his native country, and with no secure asylum, he yet refused to accept a pension of four hundred crowns, offered to him by Francis I., with the right of choosing his own place of residence. He could not bear, even in his deep poverty and distress, to be a pensioner on the bounty of the great enemy of the German Emperor. At the town of Basle Hütten was well received. The members of the town council, and the whole population, pressed around the famous but unhappy fugitive. His old friend, Erasmus, alone stood aloof from him, as he always did from misfortune and danger, and entreated him not to call upon him unless he had an absolute necessity for seeing him. Pity that this great literary genius should have had the heart of a selfish coward. Basle was not, however, to furnish a calm retreat to the persecuted reformer. The Bishop loudly demanded that he should be driven away, and the senate, not daring to resist, entreated Hütten to leave them for the sake of the public peace and his own personal safety. He submitted, and removed to Mulhausen, where the magistrates and citizens had been for some time consulting as to the propriety of establishing the reformed worship; and

there, on the 12th March, 1523, he had the satisfaction of assisting at the solemn suppression of the Romish ritual. At Mulhausen, Hütten enjoyed for a time much sympathy and kindness, which soothed the bitterness of his patriotic regrets, and made him forget the uncertainty of his position, and the pains of the malady which was sapping his strength. But here he was struck by a barbed arrow from the quiver of a former friend, for he received a letter from Erasmus full of insulting speeches and perfidious attacks upon the principal reformers. This cowardly assault awakened all his indignation, and he replied in a violent pamphlet, in which he lashed the compromising, easy conscience of the man who wished at once to preserve his private life in peace, and to send war in the world by his writings.

But the exile was not long to enjoy a quiet haven. A reaction against the Reformation, excited by the priests, took place at Mulhausen, and Hütten found himself once more compelled to seek a new refuge. This he found at Zurich, beside the great Swiss reformer, Zwingli, who thus writes of him to his friend Pirckheimer :

"Is this your terrible Hütten, that destroyer, that conqueror? He who comforts himself with such humility and sweetness towards his friends, towards children, and the poorest of men! How can we believe that a mouth so amiable has raised such a tempest?"

But the strength of this indomitable and hardly-trying man was fast failing him. On the 12th May, 1524, he writes to his friend Eoban Hess :

"Will not fate at length cease so cruelly to pursue me? My only consolation is, that I have courage equal to my misfortunes. Germany, fallen as she is, can no more afford me an asylum: a voluntary flight has brought me into Switzerland, and will perhaps conduct me further still. I hope that God will one day unite the friends of the truth, now dispersed over the world, and will humble our enemies."

Perhaps this good hope was present with the hero to the end, and soothed the bitterness of a death among strangers, far from his native country, and from all he loved and cherished.

Zwingli had sent Hütten to the island of Uffnau, on the Lake of Zurich, that he might have the benefit of the attendance of the clergyman, who was skilled in medicine; and there he died on the 29th August, 1524, at the early age of thirty-six, and there his remains repose. No monument marks the grave of one of the noblest champions ever raised up to defend the civil and religious liberties of mankind; and by a strange caprice of destiny, the burial-place of the deadliest foe of monastic establishments now belongs to the convent of Einsiedeln. Lamentations over the melancholy and premature death of Hütten were not wanting. Crotus Rubianus and Melancthon paid their tribute of praise and of regret, and his friend Eoban Hess, in a few simple words, has summed up his character and celebrated his virtues: "No one was a greater enemy of the wicked; no one a greater friend of the good."

From Bentley's Miscellany.

GOING INTO EXILE; OR, THE DIAMOND BRACELET.

I.

A LITTLE man was striding about his library with impatient steps. He wore a wadded dressing-gown, handsome once, but remarkably shabby now, and he wrapped it closely around him, though the heat of the weather was intense. But Colonel Hope, large as were his coffers, never

spent upon himself a superfluous farthing, especially in the way of personal adornment; and Colonel Hope would not have felt too warm, cased in sheep-skins, for he had spent the best part of his life in India, and was of a chilly nature.

The Colonel had that afternoon been made acquainted with an unpleasant transaction which had occurred in his

house. The household termed it a mystery; he, a scandalous robbery: and he had written forthwith to the nearest chief police station, demanding that an officer might be dispatched back with the messenger, to investigate it. So there he was, waiting for their return in impatient expectation, and occasionally halting before the window, to look out on the busy London world.

The officer at length came, and was introduced. The Colonel's wife, Lady Sarah, had joined him then; and they proceeded to give him the outline of the case. A valuable diamond bracelet, recently presented to Lady Sarah by her husband, had disappeared in a singular manner. Miss Seaton, the companion to Lady Sarah, had temporary charge of the jewel-box, and had brought it down the previous evening, Thursday, this being Friday, to the back drawing-room, and laid several pairs of bracelets out on a table, ready for Lady Sarah, who was going to the opera, to choose which she would wear when she came up from dinner. Lady Sarah chose a pair, and put, herself, the rest back into the box, which Miss Seaton then locked, and carried to its place up-stairs. In the few minutes that the bracelets lay on the table, the most valuable one, a diamond, disappeared from it.

"I did not want this to be officially investigated; at least, not so quickly," observed Lady Sarah to the officer. "The Colonel wrote for you quite against my wish."

"And so have let the thief get clear off, and put up with the loss!" cried the Colonel. "Very fine, my lady."

"You see," added her ladyship, explaining to the officer, "Miss Seaton is a young lady of good family, not a common companion; a friend of mine, I may say. She is of feeble constitution, and this affair has so completely upset her, that I fear she will be laid on a sick-bed."

"It won't be my fault if she is," retorted the Colonel. "The loss of a diamond bracelet, worth two or three hundred guineas, is not to be hushed up. They are not to be bought every day, Lady Sarah."

The officer was taken to the room whence the bracelet disappeared. It presented nothing peculiar. It was a back drawing-room, the folding-doors between it and the front-room standing open, and the back-window, a large one, looking out upon some flat leads—as did all the

row of houses. The officer seemed to take in the points of the double-room at a glance; its door of communication, its two doors opening to the corridor outside, and its windows. He looked at the latches of the two entrance-doors, and he leaned from the front-windows, and he leaned from the one at the back. He next requested to see Miss Seaton, and Lady Sarah fetched her—a delicate girl with a transparent skin, looking almost too weak to walk. She was in a visible tremor, and shook as she stood before the stranger.

He was a man of pleasant manners and speech, and he hastened to reassure her. "There's nothing to be afraid of, young lady," said he, with a broad smile. "I am not an ogre, though I do believe some timid folks look upon us as such. Just please to compose yourself, and tell me as much as you can recollect of this."

"I put the bracelets out here," began Alice Seaton, laying hold of the table underneath the window, not more to indicate it than to steady herself, for she was almost incapable of standing. "The diamond bracelet, the one lost, I placed here," she added, touching the middle of the table at the back, "and the rest I laid out round, and before it."

"It was worth more than any of the others, I believe," interrupted the official.

"Much more," growled the Colonel.

The officer nodded to himself, and Alice resumed:

"I left the bracelets, and went and sat down at one of the front-windows —"

"With the intervening doors open, I presume?"

"Wide open, as they are now," said Alice, "and the other two doors shut. Lady Sarah came up from dinner almost directly, and then the bracelet was not there."

"Indeed! You are quite certain of that."

"I am quite certain," interposed Lady Sarah. "I looked for that bracelet, and, not seeing it, I supposed Miss Seaton had not laid it out. I put on the pair I wished to wear, and placed the others in the box, and saw Miss Seaton lock it."

"Then you did not miss the bracelet at that time?" questioned the officer.

"I did not miss it in one sense, because I did not know it had been put out," returned her ladyship. "I saw it was not there."

"But did you not miss it?" he asked of Miss Seaton.

"I only reached the table as Lady Sarah was closing the lid of the box," she answered. "Lady Frances Chenevix had detained me in the front-room."

"My sister," explained Lady Sarah. "She is on a visit to me, and had come with me up from dinner."

"You say you went and sat in the front-room," resumed the officer to Alice, in a quicker tone than he had used previously: "will you show me where?"

Alice did not stir, she only turned her head towards the front-room, and pointed to a chair a little drawn away from the window. "In that chair," she said. "It stood as it stands now."

The officer looked baffled. "You must have had the back-room full in view from thence; both the door and window."

"Quite so," replied Alice. "If you will sit down in it, you will perceive that I had uninterrupted view, and faced the doors of both rooms."

"I perceive so from here. And you saw no one enter?"

"No one did enter. It was impossible they could do so, without my observing it. Had either of the doors been only quietly unlatched, I must have seen."

"And yet the bracelet vanished!" interposed Colonel Hope. "They must have been confounded deep, whoever did it, but thieves are said to possess sleight of hand."

"They are clever enough for it, some of them," observed the officer.

"Rascally villains! I should like to know how they accomplished this."

"So should I," significantly returned the officer. "At present it appears to me incomprehensible."

There was a pause. The officer seemed to muse; and Alice, happening to look up, saw his eyes stealthily studying her face. It did not tend to reassure her.

"Your servants are trustworthy; they have lived with you some time?" resumed the officer, not apparently attaching much importance to what the answer might be.

"Were they all escaped convicts, I don't see that it would throw light on this," retorted Colonel Hope. "If they came into the room to steal the bracelet, Miss Seaton must have seen them."

"From the time you put out the bracelets, to that of the ladies coming up from

dinner, how long was it?" inquired the officer of Alice.

"I scarcely know," panted she, for, what with his close looks and his close questions, she was growing less able to answer. "I did not take particular notice of the elapse of time: I was not well yesterday evening."

"Was it half an hour?"

"Yes—I dare say—nearly so."

"Miss Seaton," he continued in a brisk tone, "will you have any objection to take an oath before a magistrate—in private, you know—that no person whatever, except yourself, entered either of these rooms during that period?"

Had she been requested to go before a magistrate and testify that she, herself, was the guilty person, it could scarcely have affected her more. Her cheek grew white, her lips parted, and her eyes assumed a beseeching look of terror. Lady Sarah Hope hastily pushed a chair behind her, and drew her down upon it.

"Really, Alice, you are very foolish to allow yourself to be excited about nothing," she remonstrated: "you would have fallen on the floor in another minute. What harm is there in taking an oath—and in a private room? You are not a Chartist or a Mormon—or whatever the people call themselves, who profess to object to oaths, on principle."

The officer's eyes were still keenly fixed on Alice Seaton's, and she cowered visibly beneath his gaze. "Will you assure me, on your sacred word, that no person did enter the room?" he repeated, in a low, firm tone; which somehow carried to her the terrible belief that he believed she was trifling with him.

She looked at him; gasped, and looked again; and then she raised her handkerchief in her hand, and wiped her damp and ashy face.

"I think some one did come in," whispered the officer in her ear; "try and recollect." And Alice fell back in hysterics.

Lady Sarah led her from the room, herself speedily returning to it.

"You see how weak and nervous Miss Seaton is," was her remark to the officer, but glancing at her husband. "She has been an invalid for years, and is not strong like other people. I felt sure we should have a scene of some kind, and that is why I wished the investigation not to be gone into hurriedly."

"Don't you think there are good

grounds for an investigation, sir?" testily asked Colonel Hope of the officer.

"I must confess I do think so, Colonel," was the reply.

"Of course: you hear, my lady. The difficulty is, how can we obtain the first clue to the mystery."

"I do not suppose there will be an insuperable difficulty," observed the officer. "I believe I have obtained one."

"You are a clever fellow, then, cried the Colonel, "if you have obtained it here. What is it?"

"Will Lady Sarah allow me to mention it—whatever it may be—without taking offense?" continued the officer, looking at her ladyship.

She bowed her head, wondering much.

"What's the good of standing upon ceremony?" peevishly put in Colonel Hope. "Her ladyship will be as glad as we shall be, to get back her bracelet; more glad, one would think. A clue to the thief! Who can it have been?"

The detective smiled. When men are as high in the police force as he, they have learned to give every word its due significance. "I did not say a clue to the thief, Colonel: I said a clue to the mystery."

"Where's the difference?"

"Pardon me, it is indisputably perceptible. That the bracelet is gone, is a palpable fact: but by whose hands it went, is as yet a mystery."

"What do you suspect?"

"I suspect," returned the officer, lowering his voice, "that Miss Seaton knows how it went."

There was a silence of surprise; on Lady Sarah's part, of indignation.

"Is it possible that you suspect *her*?" uttered Colonel Hope.

"No," said the officer, "I do not suspect herself: she appears not to be a suspicious person in any way: but I believe she knows who the delinquent is, and that fear, or some other motive, keeps her silent. Is she on familiar terms with any of the servants?"

"But you can not know what you are saying!" interrupted Lady Sarah. "Familiar with the servants! Miss Seaton is a gentlewoman, and has always moved in high society. Her family is little inferior to mine; and better—better than the Colonel's," concluded her ladyship, determined to speak out.

"Madam," said the officer, "you must

be aware that in an investigation of this nature, we are compelled to put questions which we do not expect to be answered in the affirmative. Colonel Hope will understand what I mean, when I say that we call them 'feelers.' I did not expect to hear that Miss Seaton had been on familiar terms with your servants, (though it might have been;) but that question, being disposed of, will lead me to another. I suspect that some one did enter the room and make free with the bracelet, and that Miss Seaton must have been cognizant of it. If a common thief, or an absolute stranger, she would have been the first to give the alarm: if not on too familiar terms with the servants, she would be as little likely to screen them. So we come to the question—who could it have been?"

"May I inquire why you suspect Miss Seaton?" coldly demanded Lady Sarah.

"Entirely from her manner; from the agitation she displays."

"Most young ladies, particularly in our class of life, would betray agitation at being brought face to face with a police-officer," urged Lady Sarah.

"My Lady," he returned, "we are keen, experienced men; and we should not be fit for the office we hold if we were not. We generally do find lady witnesses betray uneasiness when first exposed to our questions, but in a very short time, often in a few moments, it wears off, and they grow gradually easy. It was not so with Miss Seaton. Her agitation, excessive at first, increased visibly, and it ended as you saw. I did not think it the agitation of guilt, but I did think it that of conscious fear. And look at the related facts: that she laid the bracelets there, never left them, no one came in, and yet the most valuable one vanished. We have many extraordinary tales brought before us, but not quite so extraordinary as that."

The Colonel nodded approbation; Lady Sarah began to feel uncomfortable.

"I should like to know whether any one called whilst you were at dinner," mused the officer. "Can I see the man who attends to the hall-door?"

"Thomas attends to that," said the Colonel, ringing the bell. "There is a side-door, but that is only for the servants and trades-people."

"I heard Thomas say that Sir George Danvers called while we were at dinner,"

observed Lady Sarah. "No one else. And Sir George did not go up-stairs."

The detective smiled. "If he had, my lady, it would have made the case no clearer."

"No," laughed Lady Sarah, "poor old Sir George would be puzzled what to do with a diamond bracelet."

"Will you tell me," said the officer, wheeling sharply round upon Thomas when he entered, "who it was that called here yesterday evening, while your master was at dinner? I do not mean Sir George Danvers; the other one."

Thomas visibly hesitated: and that was sufficient for the lynx-eyed officer. "Nobody called but Sir George, sir," he presently said.

The detective stood before the man, staring him full in the face with a look of amusement. "Think again, my man," quoth he. "Take your time. There was some one else."

The Colonel fell into an explosion: reproaching the unfortunate Thomas with having eaten his bread for five years, to turn round upon the house and its master at last, and act the part of a deceitful, conniving wretch, and let in that swindler—

"He is not a swindler, sir," interrupted Thomas.

"Oh! no, not a swindler," roared the Colonel, "he only steals diamond bracelets."

"No more than I steal 'em, sir," again spoke Thomas. "He's not capable, sir. It was Mr. Gerard."

The Colonel was struck speechless: his rage vanished, and down he sat in a chair, staring at Thomas. Lady Sarah colored with surprise.

"Now, my man," cried the officer, "why could you not have said it was Mr. Gerard?"

"Because Mr. Gerard asked me not to say he had been, sir; he is not friendly here, just now; and I promised him I would not. And I'm sorry to have had to break my word."

"Who is Mr. Gerard, pray?"

"He is my nephew," interposed the checkmated Colonel. "Gerard Hope."

"But, as Thomas says, he is no swindler," remarked Lady Sarah: "he is not the thief. You may go, Thomas."

"No, sir," stormed the Colonel; "fetch Miss Seaton here first. I'll come to the bottom of this. If he has done it, Lady

Sarah, I will bring him to trial; though he is Gerard Hope."

Alice came back, leaning on the arm of Lady Francis Chenevix; the latter having been dying with curiosity to come in before.

"So the mystery is out, ma'am," began the Colonel to Miss Seaton: "it appears this gentleman was right, and that somebody did come in; and that somebody the rebellious Mr. Gerard Hope."

Alice was prepared for this, for Thomas had told her Mr. Gerard's visit was known; and she was not so agitated as before. It was the *fear* of its being found out, the having to conceal it, which had troubled her.

"It is not possible that Gerard can have taken the bracelet," uttered Lady Sarah.

"No, it is not possible," replied Alice. "And that is why I was unwilling to mention his having come up."

"What did he come for?" thundered the Colonel.

"It was not an intentional visit. I believe he only followed the impulse of the moment. He saw me at the front-window, and Thomas, it appears, was at the door, and he ran up."

"I think you might have said so, Alice," observed Lady Sarah, in a stiff tone.

"Knowing he had been forbidden the house, I did not wish to bring him under the Colonel's displeasure," was all the excuse Alice could offer. "It was not my place to inform against him."

"I presume he approached sufficiently near the bracelets to touch them, had he wished?" observed the officer, who of course had now made up his mind upon the business—and upon the thief.

"Y—es," returned Alice, wishing she could have said no.

"Did you notice the bracelet there, after he was gone?"

"I can not say I did. I followed him from the room when he left, and then I went into the front-room, so that I had no opportunity of observing."

"The doubt is solved," was the mental comment of the detective officer.

The Colonel, hot and hasty, sent several servants various ways in search of Gerard Hope, and he was speedily found and brought. A tall and powerful young man, very good-looking.

"Take him into custody, officer," was the Colonel's impetuous command.

"Hands off, Mr. Officer—if you are an

officer," cried Gerard, in the first shock of the surprise, as he glanced at the gentlemanly appearance of the other, who wore plain clothes, "you shall not touch me, unless you can show legal authority. This is a shameful trick. Colonel—excuse me—but as I owe nothing to you, I do not see that you have any such power over me."

The group would have made a fine study: especially Gerard, his head thrown back in defiance, and looking angrily at every body.

"Did you hear me?" cried the Colonel.

"I must do my duty," said the police-officer, approaching Gerard. "And for authority—you need not suppose I should act, if without it."

"Allow me to understand first," remarked Gerard, haughtily eluding the officer. "Which is it for? What is the sum total?"

"Two hundred and fifty pounds," growled the Colonel. "But if you are thinking to compromise it in that way, young sir, you will find yourself mistaken."

"Oh! no fear," retorted Gerard; "I have not two hundred and fifty pence. Let me see: it must be Dobbs's. A hundred and sixty—how on earth do they slide the expenses up? I did it, sir, to oblige a friend."

"The deuce you did!" echoed the Colonel, who but little understood the speech, except the last sentence. "If ever I saw such a cool villain in all my experience!"

"He was awfully hard up," went on Gerard, "as bad as I am now; and I did it. I don't deny having done such things on my own account, but from this particular one I did not benefit a shilling."

His cool assurance, and his words, struck them with consternation.

"Dobbs said he'd take care I should be put to no inconvenience—and this comes of it! That's trusting your friends. He vowed to me, this very week, that he had provided for the bill."

"He thinks it is only an affair of debt!" screamed Lady Frances Chenevix. "O Gerard! what a relief! we thought you were confessing."

"You are not arrested for debt, sir," cried the officer, "but for felony."

"For felony!" uttered Gerard Hope. "Oh! indeed! Could you not make it murder?" he added, sarcastically.

"Off with him to Marlborough street,

officer," cried the exasperated Colonel, "and I'll come with you and prefer the charge. He scoffs at it, does he?"

"Yes, that I do," answered Gerard; "for whatever pit-falls I may have got into, in the way of carelessness, I have not gone into crime."

"You are accused, sir," said the officer, "of stealing a diamond bracelet."

"Hey!" uttered Gerard, a flash of intelligence rising to his face, as he glanced at Alice. "I might have guessed it was the bracelet affair, if I had had my recollection about me."

"Oh! ho," triumphed the Colonel, in sneering jocularity, "so you expected it was the bracelet, did you? We shall have it all out presently."

"I heard of the bracelet's disappearance," said Mr. Hope. "I met Miss Seaton when she was out this morning, and she told me it was gone."

"Better make no admissions," whispered the officer in his ear. "They may be used against you."

"Whatever admissions I may make, you are at liberty to use them, for they are truth," haughtily returned Gerard. "Is it possible that you do suspect me of taking the bracelet, or is this a joke?"

"Allow me to explain," panted Alice, stepping forward. "I—I—did not accuse you, Mr. Hope; I would not have mentioned your name in connection with it, because I am sure you are innocent; but when it was discovered that you had been here, I could not deny it."

"The charging me with having taken it is absurdly preposterous," exclaimed Gerard, looking first at his uncle, and then at the officer. "Who accuses me?"

"I do," said the Colonel.

"Then I am very sorry it is not somebody else, instead of you, sir."

"Explain. Why?"

"Because they should get a kindly horsewhipping."

"Gerard," interrupted Lady Sarah, "do not treat it in that light way. If you did take it, say so, and you shall be forgiven. I am sure you must have been put to it terribly hard; only confess it, and the matter shall be hushed up."

"No it shan't, my lady," cried the Colonel. "I will not have him encouraged—I mean, felony compounded."

"It shall," returned Lady Sarah, "it shall indeed. The bracelet was mine, and I have a right to do as I please. Believe

me, Gerard, I will put up with the loss without a murmur: only confess, and let the worry be done with."

Gerard Hope looked at her: little trace of shame was there in his countenance. "Lady Sarah," he asked in a deep tone, "can you indeed deem me capable of taking your bracelet?"

"The bracelet was there, sir, and it went; and you can't deny it," uttered the Colonel.

"It was there, fast enough," answered Gerard. "I held it in my hand two or three minutes, and was talking to Miss Seaton about it. I was wishing it was mine, and saying what I should do with it."

"O Mr. Hope! pray say no more," involuntarily interrupted Alice. "You will make appearances worse."

"What do you want to screen him for?" impetuously broke forth the Colonel, turning upon Alice. "Let him say what he was going to say."

"I do not know why I should not say it," Gerard Hope answered, in, it must be thought, a spirit of bravado or recklessness, which he disdained to check. "I said I should spout it."

"You'll send off to every pawnshop in the metropolis, before the night's over, Mr. Officer," cried the choking Colonel, breathless with rage. "This beats brass."

"But I did not take it any the more for having said that," put in Gerard, in a graver tone. "The remark might have been made by any one from a duke downwards, if reduced to his last shifts, as I am. I said *if* it were mine: I did not say I would steal to do it. Nor did I."

"I saw him put it down again," said Alice Seaton, in a calm, steady voice.

"Allow me to speak a word, Colonel," resumed Lady Sarah, interrupting something her husband was about to say. "Gerard—I can not believe you guilty; but consider the circumstances. The bracelet was there: you acknowledge it: Miss Seaton left the apartment when you did, and went into the front-room: yet when I came up from dinner, it was there no longer."

The Colonel would speak. "So it lies between you and Miss Seaton," he put in. "Perhaps you would like to make believe she appropriated it."

"No," answered Gerard, with a flashing eye. "*She* can not be doubted. I would rather take the guilt upon myself,

than allow her to be suspected. Believe me, Lady Sarah, we are both innocent."

"The bracelet could not have gone without hands to take it, Gerard," replied Lady Sarah. "How else do you account for its disappearance?"

"I believe there must be some misapprehension, some great mistake in the affair altogether, Lady Sarah. It appears incomprehensible now, but it will be unraveled."

"Ay, and in double-quick time," wrathfully exclaimed the Colonel. "You must think you are talking to a pack of idiots, Master Gerard. Here the bracelet was spread temptingly out on a table, you went into the room, being hard up for money, fingered it, wished for it, and both you and the bracelet disappeared. Sir," turning sharply round to the officer—"did a clearer case ever go before a jury?"

Gerard Hope bit his lip. "Be more just, Colonel," said he. "Your own brother's son steal a bracelet!"

"And I am happy my brother's not alive to know it," rejoined the Colonel, in an obstinate tone. "Take him in hand, Mr. Officer: we'll go to Marlborough street. I'll just change my coat and—"

"No, no, you will not," cried Lady Sarah, laying hold of the dressing-gown and the Colonel in it; "you shall not go, nor Gerard either. Whether he is guilty or not, it must not be brought against him publicly. He bears your name, Colonel, and so do I, and it would reflect disgrace on us all."

"Perhaps you are made of money, my lady. If so, you may put up with the loss of a two-hundred-and-fifty-guinea bracelet. I don't choose to do so."

"Then, Colonel, you will; and you must. Sir," added Lady Sarah to the detective, "we are obliged to you for your attendance and advice, but it turns out to be a family affair, as you perceive, and we must decline to prosecute. Besides, Mr. Hope may not be guilty."

Alice rose, and stood before Colonel Hope. "Sir, if this charge were preferred against your nephew; if it came to trial, I think it would kill me. You know my unfortunate state of health; the agitation, the excitement of appearing to give evidence would be—I—I can not continue; I can not speak of it without terror; I *pray* you, for my sake, do not prosecute Mr. Hope."

The Colonel was about to storm forth an answer, but her white face, her heaving throat, had some effect even on him. "He is so doggedly obstinate, Miss Seaton. If he would but confess, and tell where it is, perhaps I'd let him off."

Alice thought somebody else was obstinate. "I do not believe he has any thing to confess," she deliberately said; "I truly believe that he has not. He could not have taken it, unseen by me: and when we quitted the room, I feel sure the bracelet was left in it."

"It was left in it, so help me Heaven!" uttered Gerard.

"And, now, I have got to speak," added Frances Chenevix. "Colonel, if you were to press the charge against Gerard, I would go before the magistrates, and proclaim myself the thief. I vow and protest I would, just to save him; and you and Lady Sarah could not prosecute me, you know."

"You do well to stand up for him!" retorted the Colonel. "You would not be quite so ready to do it, though, my Lady Fanny, if you knew something I could tell you."

"Oh! yes, I should," returned the young lady, with a vivid blush.

The Colonel, beset on all sides, had no choice but to submit; but he did so with an ill-grace, and dashed out of the room with the officer, as fiercely as if he had been charging an enemy at full tilt. "The sentimental apes these women make of themselves!" cried he, in his polite way, when he had got him in private. "Is it not a clear case of guilt?"

"In my private opinion, it certainly is," was the reply; "though he carries it off with a high hand. I suppose, Colonel, you still wish the bracelet to be searched for?"

"Search in and out, and high and low; search every where. The rascal! to dare even to enter my house in secret!"

"May I inquire if the previous breach, with your nephew, had to do with money affairs?"

"No," said the Colonel, turning more crusty at the thoughts called up. "I fixed upon a wife for him, and he wouldn't have her; so I turned him out of doors and stopped his allowance."

"Oh!" was the only comment of the police-officer.

II.

It was in the following week, and Saturday night. Thomas, without his hat, was standing at Colonel Hope's door, chatting to an acquaintance, when he perceived Gerard come tearing up the street. Thomas's friend backed against the rails and the spikes, and Thomas himself stood with the door in his hand, ready to touch his hair to Mr. Gerard, as he passed. Instead of passing, however, Gerard cleared the steps at a bound, pulled Thomas with himself inside, shut the door, and double-locked it.

Thomas was surprised in all ways. Not only at Mr. Hope's coming in at all, for the Colonel had again harshly forbidden the house to him and the servants to admit him, but at the suddenness and strangeness of the action.

"Cleverly done," quoth Gerard, when he could get his breath. "I saw a shark after me, Thomas, and had to make a bolt for it. Your having been at the door saved me."

Thomas turned pale. "Mr. Gerard, you have locked it, and I'll put up the chain, if you order me, but I'm afeared its going again the law to keep out them detectives by force of arms."

"What's the man's head running on now?" returned Gerard. "There are no detectives after me; it was only a seedy sheriff's officer. Psha, Thomas! there's no worse crime attaching to me than a slight suspicion of debt."

"I'm sure I trust not, sir; only master will have his own way."

"Is he at home?"

"He is gone to the opera with my lady. The young ladies are up stairs alone. Miss Seaton has been ill, sir, ever since the bother, and Lady Frances is staying home with her."

"I'll go up and see them. If they are at the opera, we shall be snug and safe."

"O Mr. Gerard! had you better go up, do you think?" the man ventured to remark. "If the Colonel should come to hear of it——"

"How can he? You are not going to tell him, and I am sure they will not. Besides, there's no help for it: I can't go out again, for hours. And, Thomas, if any demon should knock and ask for me, I am gone to—to—an evening party up at

Putney; went out, you know, by the side door."

Thomas watched him run up the stairs, and shook his head. "One can't help liking him, with it all: though where could the bracelet have gone to, if he did not take it?"

The drawing-rooms were empty, and Gerard made his way to a small room that Lady Sarah called her "boudoir." There they were: Alice buried in the pillows of an invalid chair, and Lady Frances careering about the room, apparently practicing some new dancing step. She did not see him. Gerard danced up to her, and took her hand, and joined in it.

"Oh!" she cried, with a little scream of surprise, "you! Well, I have staid at home to some purpose. But how could you think of venturing within these sacred and forbidden walls? Do you forget that the Colonel threatens us with the terrors of the law, if we suffer it? You are a bold man, Gerard."

"When the cat's away, the mice can play," cried Gerard, treating them to a *pas seul*.

"Mr. Hope!" remonstrated Alice, lifting her feeble voice, "how can you indulge these spirits, while things are so miserable?"

"Sighing and groaning won't make them light," he answered, sitting down on a sofa near to Alice. "Here's a seat for you, Fanny; come along," he added, pulling Frances to his side. "First and foremost, has any thing come to light about that mysterious bracelet?"

"Not yet," sighed Alice. "But I have no rest: I am in hourly fear of it."

"*Fear!*" uttered Gerard in astonishment.

Alice winced, and leaned her head upon her hand: she spoke in a low tone.

"You must understand what I mean, Mr. Hope. The affair has been productive of so much pain and annoyance to me, that I wish it could be ignored forever."

"Though it left me under a cloud," said Gerard. "You must pardon me if I can not agree with you. My constant hope is, that it may all come to daylight: I assure you I have specially mentioned it in my prayers."

"Pray don't, Mr. Hope!" reproved Alice.

"I'm sure I have cause to mention it, for it is sending me into exile: that, and other things."

"It is the guilty only who flee, not the innocent," said Frances. "You don't mean what you say, Gerard."

"Don't I! There's a certain boat advertised to steam from London-bridge wharf to-morrow, wind and weather permitting, and it steams me with it. I am compelled to fly my country."

"Be serious, and say what you mean."

"Seriously, then, I am over head and ears in debt. You know my uncle stopped my allowance in the spring, and sent me—metaphorically—to the dogs. It got wind; ill-news always does; I had a few liabilities, and they have all come down upon me. But for this confounded bracelet affair, there's no doubt the Colonel would have settled them; rather than let the name of Hope be dubiously bandied by the public, he would have expended his ire in growls, and then gone and done it. But that is over now; and I go to take up my abode in some renowned colony for desolate English, beyond the pale of British lock-ups. Boulogne, or Calais, or Dippe, or Brussels; I shall see: and there I may be kept for years."

Neither of the young ladies answered immediately; they saw the facts were serious, and that Gerard was only making light of it before them.

"How shall you live?" questioned Alice. "You must live there as well as here: you can not starve."

"I shall just escape the starving. I have got a trifle; enough to swear by, and keep me on potatoes and salt. Don't you envy me my prospects?"

"When do you suppose you may return?" inquired Lady Frances. "I ask it seriously, Gerard."

"I know no more than you, Fanny. I have no expectations but from the Colonel. Should he never relent, I am caged there for good."

"And so you have ventured here to tell us this, and bid us good-by?"

"No! I never thought of venturing here: how could I tell that the bashaw would be at the opera? A shark set on me in the street, and I had to run for my life. Thomas happened to be conveniently at the door, and I rushed in, and saved myself."

"A shark!" uttered Alice, in dismay, who in her experience had taken the words literally—"a shark in the street!" Lady Frances Chenevix laughed.

"One with sharp eyes and a hooked

nose, Alice, speeding after me on two legs, with a polite invitation from one of the law lords. He is watching outside now."

"How shall you get away?" exclaimed Frances.

"If the bashaw comes home before twelve, Thomas must dispose of me some where in the lower regions: Sunday is free for us, thank goodness. So please to make the most of me, both of you, for it is the last time you will have the privilege. By the way, Fanny will you do me a favor? There used to be a little book of mine in the glass bookcase, in the library; my name in it, and a mottled cover: I wish you would go and find it for me."

Lady Frances left the room with alacrity. Gerard immediately bent over Alice, and his tone changed.

"I have sent her away on purpose. She'll be half an hour rummaging, for I have not taken the book there for ages. Alice, one word before we part. You must know that it was for your sake I refused the marriage proposed to me by my uncle: you will not let me go into banishment without a word of hope; a promise of your love to lighten it."

"O Gerard!" she eagerly said, "I am so glad you have spoken; I almost think I should have spoken myself, if you had not. Just look at me."

"I am looking at you," he fondly answered.

"Then look at my hectic face; my constantly tired limbs; my sickly hands; do they not plainly tell you that the topics you would speak of, must be barred topics to me?"

"Why should they be? You will get stronger."

"Never. There is no hope of it. Many years ago, when the illness first came upon me, the doctors said I might grow better with time; but the time has come, and come, and come, and—gone; and only left me a more confirmed invalid. To an old age I can not live: most probably but a few years: ask yourself, Gerard, if I am one who ought to marry, and leave behind a husband to regret me, perhaps children. No, no."

"You are cruel, Alice."

"The cruelty would be, if I selfishly allowed you to talk of love to me; or, still more selfishly, let you cherish hopes that I would marry. When you hinted at this,

the other evening, the evening that wretched bracelet was lost, I reproached myself with cowardice, in not answering more plainly than you had spoken. I should have told you, Gerard, as I tell you now, that nothing, no persuasion from the dearest person on earth, shall ever induce me to marry."

"You dislike me, I see that."

"I did not say so," answered Alice, with a glowing cheek. "I think it very possible that—if I could allow myself ever to dwell on such things—I should like you very much; perhaps better than I could like any one."

"And why will you not?" he persuasively uttered.

"Gerard, I have told you. I am too weak and sickly to be other than I am. It would be a sin, in me, to indulge hopes of it: it would only be deceiving myself and you. No, Gerard, my love and hopes must lie elsewhere."

"Where?" he eagerly asked.

Alice pointed upwards. "I am learning to look upon it as my home," she whispered, "and I must not suffer hindrances to obscure the way. It will be a better home than even your love, Gerard."

Gerard Hope smiled. "*Even* than my love: Alice, you like me more than you admit. Unsay your words, my dearest, and give me hope."

"Do not vex me," she resumed in a pained tone; "do not seek to turn me from my duty. I—I—though I scarcely like to speak of these sacred things, Gerard—I have put my hand on the plow: even you can not turn me back."

He did not answer; he only played with the hand he held between both of his.

"Tell me one thing, Gerard: it will be safe. Was not the dispute about Frances Chenevix?"

He contracted his brow; and nodded.

"And you could refuse her! You must learn to love her, for she would make you a good wife."

"Much chance there is now of my making a wife of any one!"

"Oh! this will blow over in time: I feel it will. Meanwhile—"

"Meanwhile you destroy every hopeful feeling I thought to take, to cheer me in my exile," was his impatient interruption.

"I love you alone, Alice; I have loved you for months, truly, fervently, and I know you must have seen it."

"Love me still, Gerard," she softly answered, "but not with the love you would give to one of earth; the love you will give — I hope — to Frances Chenevix. Think of me as one rapidly going; soon to be gone."

"Oh! not yet!" he cried, in an imploring tone, as if it were as she willed.

"Not just yet: I hope to see you return from exile. Let us say farewell while we are alone."

She spoke the last sentence hurriedly, for footsteps were heard. Gerard snatched her to him, and laid his face upon hers.

"What cover did you say the book had?" demanded Frances Chenevix of Gerard, who was then leaning back on the sofa, apparently waiting for her. "A mottled? I can not see one any thing like it."

"No? I am sorry to have given you the trouble, Fanny. It has gone perhaps, amongst the 'have-beens.'"

"Listen," said Alice, removing her hand from before her face, "that was a carriage stopped. Can they be come home?"

Frances and Gerard flew into the next room, whence the street could be seen.

A carriage had stopped, but not at their house. "It is too early for them yet," said Gerard.

"I am sorry things go so cross just now with you, Gerard," whispered Lady Frances. "You will be very dull, over there."

"Ay; fit to hang myself if you knew all. And the bracelet may turn up, and Lady Sarah be sporting it on her arm again, and I never know that the cloud is off me. No chance that any of you will be at the trouble of writing to a fellow."

"I will," said Lady Frances. "Whether the bracelet turns up, or not, I will write you sometimes, if you like, Gerard, and give you all the news."

"You are a good girl, Fanny," returned he, in a brighter accent, "and I will send you my address as soon as I have got one. You are not to turn proud, mind, and be off the bargain, if you find its *au cinquième*."

Frances laughed. "Take care of yourself, Gerard."

So Gerard Hope got clear off into exile. Did he pay his expenses with the proceeds of the diamond bracelet?

From Colburn's New Monthly.

THE BANKRUPT.

FROM THE DANISH OF CARL BERNHARD, AUTHOR OF "COUSIN CARL."

BY MRS. BUSHBY.

ABOUT the end of the last century there lived in Copenhagen a wealthy merchant, whose name was Kraft. He was a proud, imperious man, who looked upon riches as the greatest of all advantages, and their possession as the universal, in fact, the only passport to, or rather source of, happiness. He was extremely rich. His housekeeper declared that he was not able to count his money, he had so much; he measured his ducats by the bushel, and was certainly worth hundreds of thousands

of dollars. Born in affluence, he had never seen the slightest diminution in the fortune which surrounded him, for his father's mercantile house was already in its third generation, having descended from father to son, without any lessening of its capital during that long period, as there never had been more than one son in the family. In consequence of this, the large means of the firm had remained undivided, and they had been enabled to extend their mercantile transactions over

half the world. Their acceptances were as good as ready money. The present merchant Kraft had also an only son, but he had not, in accordance with the custom of his forefathers, taken him into partnership, for he must then have made over to him—at least in appearance—a portion of his supreme authority, and he was too haughty to share his power even with his only son. He had therefore established the young man in business on his own account, though, to a certain extent, under his own surveillance. Herr Kraft's wife had died at an early age; she had presented him with all he wished—a son, who might, in progress of time, carry on the affairs of the house and uphold its name and high credit. When she afterwards presented him with a daughter, he was so alarmed at the possibility of such gifts becoming too abundant, that he thought it rather a fortunate circumstance that the birth of this child cost its mother her life. The unwelcome little girl was sent to the care of an aunt, who brought her up, and it was not until she was a young woman that she returned to her father's house, where, however, she found no sympathy. Her brother was just married to a girl with a handsome fortune, and he had removed to a house of his own. The family now consisted of Herr Kraft, senior, his daughter, and his cousin, an old maiden lady, who was received as an inmate of his house after his wife's death, to give her a home, said Herr Kraft—that he might have some one to vent his ill-humor upon, said Miss Regine herself—that there should be another torment in the house, said the counting-house clerks and the domestic servants, who hated her and her fat, snoring pet "Mops," as much as they feared Herr Kraft and loved his daughter. For Louise was their declared favorite, and, if need had been, they would all have gone through fire and water for her.

A complete contrast to the merchant was his relative, Herr Warner. He was of a mild, unassuming character; he could easily mould his own wishes to those of others, and he valued wealth only as a means of doing good. In all his actions he was guided much more by his feelings than his interests. The lives of these two gentlemen had been as different as were their characters. Herr Warner's parents had not been rich. His mother had made an *unfortunate* marriage according to the

merchant Kraft, for her husband had lost his small inheritance, and had gone abroad to seek for fortune under foreign skies. Herr Warner, on the contrary, considered that his mother had made a *fortunate* marriage, for her and her husband's mutual affection outlived the loss of their property, and if they did not become rich in the distant country to which they had gone, they at least obtained a competence there, and a peaceful happy home.

After the death of his parents, their son went, with but a poor heritage, to the East-Indies, where he married a young lady without any fortune. Good luck, however, seemed now to attend him; his cotton-plantations thrived well and yielded large returns, and a beloved wife and three fine children made his home a paradise. At the expiration of a few years he determined to return to his native country, there to enjoy the fruits of his labors. An infectious disease, however, just then carried off his wife and her elder children, and with his youngest daughter, who alone was left to him, he sailed from India. But she died on the voyage, and was committed to the deep. Thus deprived of every tie, friendless and hopeless, the much-afflicted man quitted the ship in a French port, and repairing to Paris, he resided there for some few years, endeavoring to while away his time in the pursuit of science and literature, the pursuit of wealth having lost all interest for him, who had no one now for whom he cared to work. At length he returned to his native city, where lived quietly, frugally, and in great retirement, visiting at very few houses except at that of his cousin Herr Kraft, in whose family he appeared to take a warm interest; the regard, however, which he entertained for them all was only returned by the daughter, who became much attached to him. Herr Kraft made a point of disputing with him every day, and had so accustomed himself to this amiable habit, that he absolutely could not do without his relative and these demi-quarrels. There were many different opinions about the state of his finances. "He must have saved something in the East-Indies, where money is as plentiful as grass," said some; but others, among whom was Herr Kraft, declared "that he only had enough to make shift with, and it would be a wonder if the little he possessed should hold out during his life—for he was one of those

persons whom Dame Fortune seldom favored, as he did not put a proper value on her gifts, letting his money slip through his fingers by bestowing it on every one who came with a whining tale to him, he was so foolishly soft-hearted." And Herr Kraft was right there.

In the large drawing-room, which was furnished more richly than tastefully, and where every thing looked stiff rather than comfortable, Herr Kraft and Herr Warner were pacing up and down. Their conversation had come to a stand. They had been disputing about some of the measures of the government, and Herr Kraft had called the government stupid and despotic; he said it took upon itself to be the guardian of the nation, and to treat the burghers as if they were children under age, prescribing to them, forsooth, what they were to do, and meddling in their own private affairs! He was as warm a supporter of free trade for the higher grade of merchants, as he was an advocate for restraints upon the working classes, for he looked upon all those in an humble sphere of life as "trash, full of fraud and tricks," who must have "a rod held over their heads." It was the old story—liberality for the higher, despotism for the lower; and this will be repeated till the end of the world. Herr Warner had differed from him in opinion; he thought confidence might be placed in a wise government, and he wished freedom and justice for *all*, whether they were rich or poor. The argument might have become an angry one, but Warner gave in, for he was anxious to avoid exasperating his violent-tempered cousin, to whom he had come that morning on a delicate mission, requiring no small degree of tact.

A very fine young man, who had been for some time much attached to Louise, and who had won her affections, had determined to ask her hand in a respectful letter to her father. But the reply he had received was a flat refusal, Herr Kraft having made up his mind to listen to no proposals for his daughter except from a suitor selected by himself. Louise wept and was very sad. "Aunt Regine," as she was styled, favored her with sundry ill-natured dissertations upon ungrateful and disobedient children, Mops growled and snarled as if he were taking part with his mistress in the family disagreement, and the entire house and household ap-

peared even more dull and silent than usual. Herr Warner exerted himself to the utmost to bring his cousin to reason, but in vain. Herr Kraft was much enraged that his daughter should have presumed, even at the house of his own sister, to have become intimate with any person who was unknown to him, and could not forgive her having dared even to think of any one as a lover without *his* permission. "And the fellow such a poor wretch into the bargain!" For what was a small landed property, not much bigger than a couple of peasants' cottages and cabbage-gardens? He was of an ancient and noble family, it had been said—but what of that? He, Herr Kraft, did not care a straw for nobility; it was merely an idea—an imagination—that some men are to be better than others, because their forefathers, perhaps a hundred years ago, had been people of some renown. Herr Warner maintained that such an "imagination" contained a moral obligation to be also a distinguished, or at least a worthy man, not to dishonor one's ancestors; and reminded his cousin that he himself was by no means indifferent to his descent.

"No, in that he was certainly right," said the merchant: "but *he* had good grounds for his pride in his forefathers, because for more than a hundred years they had been wealthy merchants, who had established and maintained a highly esteemed commercial house. *That* was something solid—not mere fancy." And then he went on exhibiting all that arrogance which is sometimes to be found among the rich burghers, who are quite as proud of their wealth, and their burgher's brief of a century old, as any nobleman of his genealogical table, or his forefather's wounds or scars received on the field of glory. But Herr Warner had to go away without having disclosed his errand, and could only console poor Louise with the uncertain hope of a brighter future, in which, however, he himself had little confidence.

Soon after, her prospects became still darker. Herr Kraft gave notice suddenly one day that he had promised Louise to the son of one of his commercial friends, that the betrothal was to take place in eight days, and the wedding in three months. The husband destined for Louise was the son of a rich man, but he was far from handsome, and was still less

agreeable. Aunt Regine bestirred herself to make every preparation for the betrothal; Louise implored with tears that her father would not insist on this sacrifice; she said she would give up the man she loved, to please him, but she could not marry another. Uncle Warner, as Louise called him, did all he could for her, and pleaded her cause with her father to the best of his ability; but Herr Kraft laughed—a thing he seldom did—at hearing him speak of true and faithful love. “Sheer folly, childishness, absurd sentimentality and foolery, that would not pay a shilling of interest.”

“You will make your child miserable,” said Warner.

“On the contrary, she will get a husband worth half a plum, with the prospect of a great deal more,” said the father.

“That may be; but he squints, and has red flaming hair.”

“Bah! People don’t notice these trifles after they are married.”

“But he is also dull and stupid, and obstinate and wearisome, and unfeeling and conceited—”

“Well! and what else? However, whatever he may be, she shall take him, and so—Basta!”

“She will not take him—she will throw herself into the sea rather.”

“Bah! It is both wet and cold in the sea. She will take him, because she *shall* do so. To-morrow we shall have the betrothal, as sure as my name is Kraft, and I will not hear another word on the subject. Will you give us the pleasure of your company at the betrothal? It will take place at seven o’clock in the evening, precisely.”

Herr Kraft and Aunt Regine were the only persons in the house who slept that night. Every one else was kept awake by uneasiness and anxiety, and the unfortunate Louise cried till her eyes were so swollen, that in the morning she could hardly read a few lines which one of the housemaids brought to her from her sympathizing friend, Herr Warner, who was always anxious, as well as he could, to comfort the afflicted. After reading them, she wept still more bitterly, and the servant-girl observed her wringing her hands in despair.

The day wore on, evening came, and at seven o’clock precisely the invited guests had all arrived, forming quite a

family congress of the members of the two wealthy mercantile houses. Uncle Warner was there also. In the morning he had requested an interview with the bridegroom, and had plainly stated to him that Louise loved another, and did not entertain even the slightest friendly feeling towards him; but the young man bristled up, thrust his hand conceitedly through his carroty locks, and looked into the corner of his own eyes, while he replied with the comforting assurance, that what he had been told was nothing to the purpose, it gave him no concern, and that he would not give up the match “for any price,” as he expressed himself. Uncle Warner was deeply disappointed at his ill-success with the self-sufficient gentleman. They met again at the betrothal party, and the young man had arrayed himself, as he thought, to the best advantage, and looked as smiling as if he were awaiting a beloved and devoted bride. All was ready, and Aunt Regine went to Louise’s apartment to fetch her.

Heaven and earth! She was not there! She had gone! A letter lay on a table in her room, and that was all the information Aunt Regine could give. But old Maren had heard some one leave the house about an hour before, and almost at the same moment she had observed a carriage drive away, which had been standing at least a quarter of an hour in the street, as if the coachman were waiting for some one. There was presently an awful hubbub in the house. Herr Kraft rushed like a madman from room to room, Aunt Regine hobbled after him, doors were banged, and every corner of the mansion was searched, but Louise was no where to be found, and it was now certain that she had fled to escape the threatened evil. The letter she had left was then read, and a heart of stone might have melted at the anguish and the terror expressed in it, as well as the earnestness with which she prayed for forgiveness; every word breathed of a spirit that was utterly crushed and prostrate. But her father threw the letter into the fire, and exclaimed, in a firm, harsh voice:

“I have no longer a daughter—her name shall never again be mentioned within my doors—I disown her—I—”

Uncle Warner caught his atm, and pressed it so tightly that he involuntarily stopped, and the curse he was about to utter was arrested on his lips. Aunt

Regine began to howl with all her might.

The bridegroom and his family took their departure, and the rest of the party speedily followed their discreet example; Uncle Warner alone remained with the enraged father. But every attempt to mollify his anger, or to awaken in his mind any regret for the harshness by which he himself had driven his daughter to this desperate step, was addressed to deaf ears. Herr Kraft's wrath was only increased by every new argument the good Warner brought forward in the hope of allaying it, and at length he took his leave, expressing his intention of making every inquiry concerning the fate of the unfortunate fugitive. But just as he had left the room, the door was suddenly opened, and Herr Kraft roared after him, in an imperious voice:

"I desire to be troubled with no information you may gather; and with this—Basta!"

He then slammed the door so hard, that the noise resounded throughout the whole house.

A whole year had elapsed, but time had worked no change in Herr Kraft's vindictive feelings. Constant fretting, however, had impaired his health, and he became ill. Uncle Warner thought it might be a good opportunity to soften his heart, and he led the conversation to the sad position of forsaken old age, and upon the comfort of an affectionate nurse amidst sickness and infirmities. But Herr Kraft replied that *he* could never be forsaken in his declining years, for he had a son, "the heir of his house;" and as far as concerned illness and infirmities, the best attendant was some hired sick-nurse, for she thought only of the good wages she was to get, and it never entered her head to speculate upon what he might leave. He did not put any faith in all the babbling about affection and love, and such nonsense; it was self-interest and money that people thought of in this world, and those who had wealth would always get plenty of attention.

"But you might lose your fortune, you might become as poor as many others are, and then you would stand in need of affection, and learn to know its value," said Herr Warner.

The rich merchant stared at him with contemptuous surprise; then, with a scornful laugh, he said:

"Yes, to be sure; the moon might fall down from the heavens, but it would not be necessary on that account to put up an umbrella. Don't tease me any more with such nonsense. Enough of it—Basta!"

Herr Kraft got better, and he resumed his accustomed rich man's life—the constant yearning and busy schemes to become richer; but in his cupidity he never thought of Providence.

The moon certainly did not fall from heaven, but within the space of three years, one fine morning, as Herr Kraft was lounging over his breakfast-table, and congratulating himself on being worth a very considerable sum of money, the postman brought him a large packet of letters. His spirits fell the moment he had read them, for they conveyed the startling and afflicting intelligence of a commercial crisis in a foreign country, which had caused the failure of many houses of old standing; and their failure had brought down several others. Among these sufferers was Herr Kraft himself. Yes, the wealthy Kraft, dragged down by others, was now a *bankrupt*! At that time bankruptcy was a more serious matter than it is nowadays; a bankrupt never raised himself to fortune a second time, and there were *then* no instances of a man having failed several times, and yet being able to live on the fat of the land. However, credit, in those days, was a very different matter from what it is now.

Herr Kraft had failed—the honorable, ancient, commercial house was ruined, its riches and its lustre annihilated in a moment. What during a century, and by the zealous labor of several generations, had been gathered, had been destroyed by a single storm, and scattered like chaff before the wind! The cash-keeper suggested—and it was true what he said—that the ready money which was lying in their iron chest might be easily removed and placed somewhere else in security, and that *it* alone would be sufficient to yield a competency to any man for life. But Herr Kraft was a rigidly honest man, and had not the fall of the house thrown the cash-keeper also out of bread, he would have discharged him for advising such a fraudulent measure. Every thing was given up, and as an honorable and respected, but a poor and ruined man, the lately so wealthy and so envied Herr

Kraft took his departure from his forefathers' abode.

Herr Warner showed the warmest sympathy in his misfortunes. He immediately proposed that his cousin should come to his house, although he knew that he would have also to receive Aunt Regine and her pet, Mops. But Herr Kraft had already accepted his son's invitation to spend some time with him. This invitation to his house was perhaps not more than was due to a father who had placed him in so independent a position that he was now in easy circumstances, and had not lost any thing by the failure of the house. But yes, he had lost the expected rich inheritance, the succession to the firm, etc. etc.; and as he was his father's son, and brought up in his ways, he was very well versed in the calculation of the interest of money, and in book-keeping by single and double entry, but knew little about humanity and kind feeling, which, from his earliest infancy, he had heard his father ridicule.

His failure was a cruel trial to old Herr Kraft; his pride was severely wounded, but his heart was not at all softened. During these sorrowful days, a letter was brought to him by the post, but, as he recognized his daughter's writing, he laid it aside, and when "Uncle Warner" came, he handed it to him unopened, saying: "If you know where the writer lives, be so good as to see that this is returned; and therewith—Basta!"

His residence in his son's house was destined to be another heavy trial. The son's wife was the ruler there, and she was far from amiable. Aunt Regine had always been an eyesore to her. Her long-winded prosing was now cut short and ridiculed, and her Mops dared scarcely put his nose outside of the good lady's petticoats, under the shelter of which he lay snoring from morning till night. The endless talking about what every thing cost, and the eternal reference to the advantage of having money, which formerly had never annoyed Herr Kraft, were now exceedingly disagreeable to him, and drew many a sigh from his oppressed heart. It was given out that every thing was to be done to please him, and he heard several times a day these words: "Whatever papa likes—our only desire is that papa may be comfortable in our house." But he felt as often that these were empty phrases, a mere *façon de parler*, and that

his wishes, in reality, were never consulted. Had he known what *heart* was, he would have deplored their want of it; as it was, he only grieved for the loss of his fortune.

When a bubble that has been blown is nearly exhausted, an atom will make it burst. The life Herr Kraft led in his son's house was such, that he only waited for some event to form an excuse for leaving it; he could stand it no longer. The opportunity was not long wanting. His son's wife purchased a dog, which was double the size of Aunt Regine's Mops, and was a very pugnacious animal. It was a great amusement to the young couple to set the two dogs at each other, and they enjoyed exceedingly the terror which Hector's entrance into the room soon seemed to cause Mops, who, with as much speed as his fat would allow, would always waddle towards his mistress, and rush for protection under her garments, which she hospitably raised to admit him, sometimes, in her anxiety on his account, to a most ludicrous height. One day Herr Kraft was sitting on a sofa reading the newspapers, Aunt Regine was taking a quiet nap in an arm-chair near, and Mops, seduced by the stillness and the warm sunshine, was stretched full length upon the carpet, as happy as dog could be. Suddenly the door of the room was opened, and the son's wife entered, accompanied by Hector. As quick as lightning the animal sprang forward and pounced upon the half-sleeping Mops. Aunt Regine started from her slumbers, and lifted her dress in her hurry up to her very knees, but before Mops could take flight to that opened temple of peace, Hector had rendered the asylum useless—he had put an end to the poor favorite's existence, and Mops lay dead upon the floor! The son's wife was shaking with laughter at Aunt Regine's comical appearance, and was so amused that she forgot to call off her dog from Mops, and even when she saw the calamity that had occurred she could scarcely stop laughing. Herr Kraft witnessed this scene over his newspaper; his knitted eyebrows foretold a coming storm, but he mastered his anger, and, taking Aunt Regine by the hand, he led her out of the room.

For the first time in his life he felt a sort of longing for a sympathizing friend, and sent to ask Herr Warner to come to him. That gentleman had been much en-

gaged in the affairs of his cousin's bankruptcy, and had been striving to make the best possible arrangement with his creditors for him. Herr Kraft wished to know if he thought it would be possible to rescue as much as would enable him to live with great economy in some retired country place, for the short period of time he might still remain in this world. Nothing would induce him, he said, to remain longer in his son's house, or in Copenhagen, and he would not forsake Aunt Regine. Herr Warner encouraged him in this judicious plan, and promised to do his best to find a residence for him that would suit, in all respects, "an amiable family," he added, "where you can have the society of worthy people, and yet be as much alone as you choose. For in the days of adversity it is kind-hearted people to whom we cling, and in your son's house, though every thing is very handsome and in the nicest order, there is no disposition to make any one happy, and no trace of real hospitality." Herr Kraft made no reply to these observations, and when his cousin was gone, he fell into deep thought.

A few days afterwards, the indefatigable friend brought him the information that he had been so fortunate as to find a family at some distance in the country who were willing to receive Herr Kraft and Aunt Regine. The terms were very reasonable, and the size of the house would admit of the host and his guest being quite independent of each other. The family was small, the gentleman was clever and well-educated, his wife, indeed, was absent from home for a time, having gone to some German baths on account of her health, but the house, nevertheless, was well managed. The country round was pretty, though the situation was rather lonely. "The person in question is named Warner, like me," said the cousin, "but we are not at all of the same family. I take it for granted that his name will not be disagreeable to you." Herr Kraft shook his hand with a friendly smile, and agreed to the arrangement. Two days after this he quitted his son's house, and went into the country, accompanied by Herr Warner, Aunt Regine, and old Maren, who for many years had been Herr Kraft's especial attendant, and was acquainted with all his ways. She was the only human being of whom he would have felt the want, she

knew so well how he liked his bed made.

Uncle Warner's namesake received the travelers very politely on their arrival at their future home, and regretted that his wife was not there to welcome her guests; "she was at present at the baths of Pyrmont," he said, "but would be back ere long." Two fine children, half-hidden by their father, gazed with curiosity at the strangers who were thenceforth to live with them. By the kind care of Uncle Warner, a portion of Herr Kraft's own furniture had been brought thither from Copenhagen, and he immediately found himself quite at home in his new sitting-room: every arrangement had been made with a view to his convenience, and the indulgence of his former habits. Aunt Regine's tastes and comforts had also been sedulously attended to; her bed-chamber contained all her favorite articles of furniture, and she had a delightful surprise on finding in a basket near the stove a second Mops, who licked her hand affectionately, and was so like her defunct pet "of blessed memory," that she instantly took a fancy to him.

Uncle Warner spent a few days with them, and then returned to town with the pleasing conviction that his cousin could not fail to be comfortable in his new abode. And so he certainly was. Herr Kraft began by degrees to associate with his host, whom he found to be a sensible, pleasant man, and whom he began gradually to like and respect. Before a month had elapsed, Herr Kraft had become so much accustomed to the quiet, secluded life he led, that he would have regretted leaving the peaceful home where he had found so much hitherto unknown comfort, and where he felt that, though stripped of his fortune, he was treated with much more attention than had ever been paid to him in the days of his affluence. Nature had hitherto been a sealed book to him; he now studied it in his wanderings amidst the charming scenery of the neighborhood, and it spoke to him in language which he could never before have dreamed of understanding. He had never formerly taken any notice of children, but his host's two sweet children managed to insinuate themselves so much into his good graces, that he was always happy to see them, and have them about him. He could not imagine why he took such interest in them, but they

were such good-tempered, pretty, clever little creatures, that it was impossible not to be pleased with them. And Aunt Regine liked them almost as much as her new Mops, and *it* almost as much as her first canine favorite, so that old Maren was right in saying:

"Well, this is really a blessed house we are in; we seem to have all become better-tempered since we have been here; even the master himself is quite a different creature, and does not find fault with his bed as he used to do; formerly, there was no making it to please him. And really now, when he sits leaning his cheek on his hand, wrapt up in his own thoughts, he looks quite a good old man."

And Herr Kraft often sat with his cheek resting on his hand, wrapt up in his own thoughts, but what these were he communicated to no living being; perhaps they were hardly clear to himself, for they were frequently new and unaccustomed thoughts that came to him in his solitude.

Herr Warner occasionally paid him a short visit, and when he began to speak of commercial matters and the affairs of his late house, the old merchant would heave a deep sigh, and say: "If every one has been paid, and no one has lost any thing by me, my wishes are fulfilled. I desire nothing more—my time is over—and therewith—*Basta!*"

But the word came forth like the echo of a sound—the ghost of a habit now almost forgotten; and this conclusion, which had so often caused consternation by its irrevocable vigor, seemed now almost sad.

About the time that the mistress of the house was expected back from Pymont, Herr Kraft felt very much indisposed, and when she reached home, he was laboring under a fever, the violence of which had made him delirious. In his delirium he sometimes fancied himself the rich man, whose commercial influence extended over half the world—sometimes impoverished and destitute, a dependent on those around him; but it was always on money that his fevered dreams dwelt, and the demons of gold fought their unhallowed battles in his clouded mind. In the course of a week or two this state of morbid excitement passed away, and was succeeded by an utter prostration of strength, an extreme degree of weakness, in which he lay, for the most part, with his eyes

closed, as if sleeping. With how much kindness and solicitude was he not tended during that long illness! Day and night was his anxious hostess in his sick-room, and whenever he opened his eyes, they always rested on the same form. And when the crisis was over, the greatest danger was past, and all the family would assemble round his bed, any one would have thought that he was a dear member of it, they treated him with so much affectionate attention.

One evening, in the dusk, when they had all left his room for a short time, and old Maren alone was sitting by his bedside, he suddenly opened his eyes and gazed around him, as if he were trying to recollect where he was, and what had happened to him. He then asked about the children. Maren clasped her hands in joy that her master had recovered to consciousness again, while he repeated his question, and added:

"Is it not true, Maren, that the boy is called Ludvig, and the girl Georgia? These are both my own names——"

"Well, that is very natural," said Maren, significantly. "What else should they be called?"

"Is my cousin Warner here?" asked the invalid soon after.

He was there, and Maren went immediately to call him. Herr Kraft made a sign to him to sit down near his couch, and another to Maren to leave them by themselves.

"Cousin," he said, "I see now how things are—I am in my daughter's house. I have been very ill, but I did not lose the use of my eyes, and Louise has watched by my bed, and attended me."

Herr Warner nodded in affirmation of what he had said.

"You knew it all along. You took the place of her father when I threw her off—is it not so?"

Warner nodded again; he was so surprised to hear a person generally so stern and overbearing speak thus gently, that he could not utter a word for a moment.

"But her husband was not named Warner, and he had only a very small property, not such a large place as this? How are all these discrepancies to be reconciled?"

Herr Warner then related to him in a few words that his son-in-law had assumed *his* citizen-like name out of gratitude, be-

cause he had presented Louise with a considerable sum of money he had received from the East-Indies, for which he had no use himself, but which had enabled the couple to purchase this large property, where they had lived as happily as they could do while under the ban of his displeasure, and without having obtained his forgiveness. But now he would surely not longer withhold that, and they would all be happy together, for which he thanked God from the bottom of his heart.

To Herr Kraft it seemed all a romance. The discarded daughter had received and devotedly attended in his illness her harsh and unforgiving father; the scorned son-in-law had won his friendship and esteem; the poor cousin had been able to give away a fortune; and the rich merchant lay there an impoverished and repentant man.

"Money was in your hands only an instrument of doing good—to me it was an idol!" he exclaimed, after a silence of some duration. "But I have learned to know that our Lord did not will money to be a primary consideration. It is all gone now, however!"

Herr Warner assured him that it was not all gone; there would be a surplus left for him after all the creditors were paid, and that he himself had a little money laid by, and they would commence business together; they would soon increase the capital, as Herr Kraft understood mercantile affairs so well. The bankrupt shook his head at these smiling prospects, and replied that his hours were numbered, and he had other employments for the few that might remain of them.

"Whilst I was so ill," he continued, "I had very singular dreams. It appeared to me as if an angel and a devil were contending which should get possession of me; the angel always resembled Louise, and at last she drove the devil away, and as he was going, I seemed to hear piles of money falling down, as it were, with a crash. It was a dreadful sound. But just then I heard a voice singing solemn hymns, and, lulled by the soothing melody, I felt a sense of peace and happiness steal over me. I sank into a deep sleep, and had such a charming dream—so charming that I can not describe it."

Herr Kraft folded his hands and fell back on his pillow somewhat exhausted, but apparently tranquil. In a few min-

utes, however, he became restless, and moved uneasily from side to side on his bed. Suddenly he raised himself till he sat upright, and cried, in an excited tone: "Where is my daughter? Bring her to me—and her children—and her husband."

Herr Warner summoned them all. Louise kneeled by her father's bed, and kissed his hand, over which her tears fell fast. He took her hand and placed it in that of her husband, and then pressed his own hand on her head, as if invoking a blessing upon her. Warner brought the children to him, and he kissed them on their foreheads; he then stretched out both his hands to his cousin, but before the latter had time to clasp them, the invalid had fallen back on his pillow exhausted. It was a solemn moment, and one of entire reconciliation, without a word having been spoken; but they understood each other without words, for language is not always so necessary as many think.

A state of extreme exhaustion succeeded this exertion, and Herr Kraft lay for a long time perfectly quiet, with his eyes closed as if he were sleeping. The party who surrounded his bed felt relieved from a load of sorrow, and, full of hope that he would recover, they whispered cheerfully to each other. Late in the evening he awoke, and spoke of his son. "Tell him," said he, "that I always loved him, but I was foolish in my way of showing my affection. Tell him that, exclusive of a provision for poor Maren, all that can be saved from the wreck of my fortune shall be divided between him and Aunt Regine. Louise, you have had more of a father in Uncle Warner than in me, and may God bless him for his kindness to you! You will all remember me, I know, with affection!"

He held out his hands to them all, and smiled cordially to them, but he retained Herr Warner's and Louise's hands in his. He then lay for a few moments in silence; his lips moved, however, though no sound was heard. Perhaps he was engaged in prayer. A little after he exclaimed half-aloud:

"Is it not declared in the Bible, that 'it is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God?' The Almighty had placed much in my power. But he will be merciful to me! Every

one has got his own—I have defrauded none, and I possess nothing. Yet God has made me rich—and with that—Basta!”

A happy smile flitted over his counten-

ance—a pleasing remembrance for those who survived him. By midnight all was over; he had passed into the deep, dark sleep of death.

From the Dublin University Magazine.

T H E L A D Y A G N E S .

FROM THE GERMAN OF REDWITZ.

I.

THE WAGER.

THE Emir on a couch of down
Within his tent reclines;
His caftan is a blaze of pearls,
His robe the stars outshines.
Upon the crimson carpet gleams
The brightness of his blade;
And bubbles near an amber fount,
Out of the roseate shade.

Before him, mute, Sir Wolfram stands,
Calm in his worldless pride;
He looks not right, he looks not left,
No sword is at his side;
The trusty steel all shattered lies,
Snapped at his foe's behest;
And every fragment seems to pierce
With separate stab his breast.

Yet there he stands in knightly garb,
As if a king were he;
A scion true of Teuton race,
And flower of chivalry.
His calmness moves the Emir's wrath;
His pulse begins to beat;
And, stung as by an adder's sting,
He rocks upon his seat.

“Ho, Christian! ere beneath the knife
Thou yieldest up the ghost,
Look round with envy and behold
The wealth that I can boast.
Then own how rash it was with me
In rivalry to dare;
For, caitiff, how can all that's thine
With this my state compare?”

“Thy arm is weak, thy sword is dull;
I made thee bite the dust;

Thy steed is worthless matched with mine,
Thy armor foul with rust.
I see not on thy cap or belt
One single precious stone;
How beggarly must be the home
That thou canst call thine own!”

“Yet, Christian!”—here he flashed a glance
Of haughty pleasantry—
“If thou canst name a single thing
Wherein thou rival'st me,
By Allah! thou and thine are free!
If not, thou'st done with life.”
Cried Wolfram, with a kindling eye:
“Agreed, I name . . . my wife!”

“Thy wife!” the Emir laughed aloud.
“Ho, Christian! thou dost rave!
Why, she would look a hag beside
My very meanest slave!
The fairest fair of half the world
Within my harem shine—”
“And yet,” Sir Wolfram, calm, replied,
“Thou hast no wife like mine!”

II.

THE MESSAGE.

In her bower the Lady Agnes kneels,
Her long locks all unbound,
Before the holy Virgin's shrine—
Her arms a boy surround.
The eve's descending o'er the vale,
Earth's daily toil is o'er;
Above the rustling linden-trees
The moon is seen to soar.

“O Holy Virgin!” thus she prays—
“Bless thou our troubled rest;
And oh! forsake not him I love,
Mother of mercy blest!”

She lays her infant down to sleep,
And turns the door to close ;
When lo ! a hurried messenger
Bursts in on her repose.

"Is't thou, my page ? What news dost bring ?
Oh ! speak !" she trembling cried :
"Say, doth my lord no longer live ?
Would God with him I'd died !"
"Ah ! dearest lady, weep not thus !
Thy lord is living still ;
But, captive in a foreign land,
Sends me to speak his will."

"Go to my castle," thus he spake,
"And tell my lady there,
That she must deck herself forthwith
With all she deems most rare ;
Then take the swiftest sailing bark,
And hie across the sea ;
Bearing a ransom in her hand,
To set her husband free."

"Oh ! didst thou hear aright, my page ?
And was this all he said ?"
"No other word was his, and so
I on my mission sped.
He durst not further speak his mind,
For we were not alone ;
But in his face I well could mark
More grief than he would own."

"My trusty page, within my breast
Thy words have raised a storm ;
Oh ! how can I in woman's gauds
Deck this poor trembling form ?
My casket boasts no precious stone,
My robes no broidered gold ;
Where, then, can I a ransom seek ?
O God ! our woes behold !

"Ah ! dearest lady ! this poor life
I'd give to dry thy tears !"
"Be still, my page, and leave me now—
Bury in sleep thy fears.
If on my loved lord's message I
But ponder through the night,
Its meaning will be manifest
Before the morning's light."

Then bid she to her page farewell,
Drops down upon her knee ;
And all the long night-watches through,
Unwearied, there kneels she.

"O Holy Virgin ! well thou know'st
To me no wealth was given ;
Then help me in my sorest strait—
Oh ! help me, Queen of Heaven.

"With woman's richest charms must I
My well-beloved set free ?
What mystery lies beneath his words ?
He knows how poor I be ;
And yet, their meaning to fulfill
There surely lies a way.
O gracious Mother ! teach me how
His mandate to obey.

There kneels she, pale, and overspent,
Till the gray dawn appears ;
Then falls asleep upon her knees,
Her cheek still wet with tears.
But when her drooping eyelids close,
Her mother's heart awakes,
And o'er her upturned face a smile
Of rapturous beauty breaks.

She sees how, clothed in robes of grace,
The Virgin meek stands there :
Her vesture gold nor jewel decks—
No pearl adorns her hair.
Yet, brighter than the starry host,
A glory round her plays,
As humbly to her breast she clasps
The holy child—and prays.

The sun is high : she, too, hath risen
From the cold pavement-stone ;
With kisses she hath waked her babe,
And to her page hath flown.

"Arise, sir page ! we seek my lord :
Come, come, my baby dear !
I knew, e'er shone the morning star,
My course would be made clear !"

III.

THE CHARM.

Once more the Emir in his tent,
Sits by the yellow strand—
His guards, with glittering spears, around
The fettered captive stand ;
The eyes of all impatient strain
Towards the setting sun,
Whence, bird-like, o'er the heaving wave,
A sail is gliding on.

And all around bright forms of grace
Recline on couches there ;
Their robes with gems besprinkled o'er,
With pearls their braided hair ;
The ruby pales beside their lips,
Their bosoms shame the snow ;
But yet they thrill not with that joy
Which slaves can never know.

The Emir looks on them with pride—
But downcast is each eye ;
No beaming look responds to his,
In love's sweet liberty.
E'en Wolfram in his fetters there
Can feel some pity rise ;
But now, from his soft couch of down,
The Emir roughly cries :

"Ho, Christian ! dost thou feel as brave
Before this brilliant band ?
How think'st thou, by Circassian blood,
Will thy fair German stand ?
Yet the proud venture was thine own ;
And 'twill be pastime rare
When severed falls thy gory head
Before thy vanquished fair !"

Replied the knight: "So she but come
I quail not 'neath thine arm;
Thou'st sworn by Him we both adore
She should be safe from harm."

"Yes, yes," the Emir cried: "'twas so;
But see! the ship's in port;
Away, my Moors! and lead her in;
It will be glorious sport!"

Then back he flings the curtain fold—
Deep crimson glows the sea—
And, leaning on his saber-hilt,
Stands in expectancy—
Muttering all grimly in his beard:
"I never could have thought
A woman all this weary way
Her captive lord had sought.

"Yet well I guess, ere she appears,
She is some Amazon;
Some savage Frankish girl—and still
My wager shall be won."
Meanwhile, her babe within her arms,
Across the tottering plank
He sees her gliding to the shore,
And moving up the bank.

Her robe is like the lilies, white,
A single cross hangs there:
In rippling waves of burnished gold
Descends her showering hair;
Her downcast eye and lowly mien
With dignity are graced;
And like a rose-bud smiles her boy,
Clasped to his mother's breast.

The Emir on that vision strange
Hath riveted his eye,
While to the broad white marble steps
It moveth silently.
But, as with calm and queenly tread,
The form hath reached the hall,
By strange emotions seized, he starts,
And lets the hanging fall.

And when once more 'tis raised, and in
She glides with solemn grace,
Dazzled by supernatural light
He covers up his face;
While, artless as her babe, she cries
In accents sweet and clear,
"Oh! tell me where to seek my lord:
At his command I'm here?"

A chain has clanked . . . with lightning
speed
Their eyes have met . . . and heart
To heart has bounded with a spring,
While they are yet apart.

With a glad cry, and beaming glance
Of fond maternal pride,
She holds her boy towards his sire . . .
In twain the guards divide.

He opes his arms—she fondly clings
Around his neck—she lays
His child upon his fettered knee;
The warm tears blind his gaze.
"My wife!" "My Wolfram!" "Father
mine!"

Treasures of priceless dole!
He folds his arms about them both—
One body and one soul!

The harem beauties gaze entranced
At union such as this:
Their long-chilled hearts melt at the sight
Of never-tasted bliss.
The Emir does not bid them part,
But stands absorbed in thought;
Murmuring by fits, with folded arms—
"What wonders love hath wrought!"

Then from her husband's circling clasp
She draws herself once more;
Towards the Emir holds her child,
And kneels upon the floor.
"Pity this guileless babe, which prays
His father may be free:
In soul and body we are one—
Thou would'st not kill all three?"

And ah! so touching is her look,
It holds his own in thrall,
Till a tear rises, and in haste
He turns to hide its fall.
Sinks weepingly her weary head
On her child's locks so bright,
And round them both a halo plays
Out of the dying light.

But lo! with holy pity moved
At sight of her distress,
The slaves kneel round, and touch with awe
The border of her dress.
The Emir struggles long . . . then cries:
"Stand up! thy lord is free!
Nobly hast thou redeemed his pledge—
I have no wife like thee!"

With warmth he grasps Sir Wolfram's
hand—
"So, Knight, thy wager's won!
To-day thou'lt be my honored guest:
Yet this one truth thou'lt own;
Confess it was some magic spell—
That she'd a charmed life?"
"Yes, yes, a magic spell, indeed!
She is my Christian wife!"

From the Edinburgh Review.

CANNING'S LITERARY REMAINS.*

At the risk of startling many of our readers, we avow our conviction that the Right Hon. George Canning has never been fairly judged or duly appreciated by his countrymen. In Europe and America, he symbolizes a policy; in England, he is little better than a name. "There died the last of the rhetoricians," was the exclamation of a great northern critic and man of genius. Yet the brilliant effusions, the "purple patches," of this so-called rhetorician were underlaid and elevated by more thought and argument than would suffice to set up a host of the "practical men," who complacently repeat and dwell upon the sneer. His sacrifices in the cause of religious liberty were great and palpable. For that cause, as he truly said, he had surrendered power at a period (1812) when he would readily have bartered ten years of life for two of office. Side by side with Huskisson, of whose views he was the most eloquent exponent, he was (after Pitt) the first eminent Tory who embraced the doctrines of Free Trade. Yet Peel, who twice over resisted the progress of enlightened opinion till he could resist no longer without dismembering the empire or risking a war of classes, is imperishably enshrined in men's minds and memories as the statesman to whose welcome although tardy abandonment of long cherished errors the nation stands indebted for Catholic Emancipation and cheap bread.

Canning's death, indeed, was in every sense of the word untimely. It took place at the period most unfavorable for his fame; for the intermediate ground he had hitherto occupied between the

two great parties, somewhat analogous to that of the amphibious race of Liberal-Conservatives in our own time, had inevitably prevented him from enjoying the sympathy or cordial support of either. Nay, it had occasionally exposed him to the enmity or suspicion of both, and he needed a year or two of power to inaugurate a well-defined policy, and form a strong party of his own. Nature had intended Canning for a Whig. His opinions were enlightened; his sympathies were liberal; and if he had been born ten years later, we entertain no doubt that he would have cast in his lot with that great party of reform, which has labored with so much success, first in opposition, and afterwards in power, to regenerate the institutions and to expand the policy of England. But Mr. Canning entered public life at the moment when a fierce Tory reaction, excited by the monstrous excesses of the French Revolution, had confounded Liberalism with Jacobinism, and when Mr. Pitt himself sacrificed to repression and to war the more enlarged views with which he had entered on the administration of public affairs. Bred in this school, Canning's impetuous disposition flung him into the tide of party at its flood. His wit and his eloquence were devoted to a cause which was not that of mankind; and he was habitually engaged in warfare with those whose policy and whose labors he might, in more favorable times, have applauded and shared. Towards the close of his career these liberal tendencies, which belonged to his generous nature, forced their way through the restraints of party; and the Tories, faithful to their practice of hunting down the men of genius whom accident or tradition may have placed at their head, became his bitterest enemies and harried him to the grave. The consequence was that in the prime of his life and the heyday of his fame, the greatness of his talents was not recognized by the Whigs; and that the brilliant part he played from 1820 to 1827 was ma-

* *Poetry of the Anti-Jacobin: comprising the celebrated Political and Satirical Poems, Parodies, and Jeux-d'esprit of the Right Hon. George Canning, the Earl of Carlisle, Marquis Wellesley, the Right Hon. J. H. Frere, W. Gifford, Esq., the Right Hon. W. Pitt, G. Ellis, Esq., and others.* With Explanatory Notes, by CHARLES EDMONDS. Second edition, considerably enlarged. With Six Etchings, by the famous caricaturist, JAMES GILLRAY. London: 1854.

ligned by the Tories. Our own honored ally, Sydney Smith—*haud impar congressus*—was the most formidable and persevering of his assailants. Mr. Canning and his parasites were the subjects of the matchless comparison of the blue-bottle fly—"the bluest, grandest, merriest, most important animal in existence;" and throughout the whole of his celebrated letters, Peter Plymley persisted in treating Canning as a mere "joker of jokes," and thus summed up his merits and demerits in the year 1808:

"I can only say I have listened to him long and often, with the greatest attention; I have used every exertion in my power to take a fair measure of him, and it appears to me impossible to hear him upon any arduous topic without perceiving that he is eminently deficient in those solid and serious qualities, upon which, and upon which alone, the confidence of a great country can properly repose. He sweats, and labors, and works for sense, and Mr. Ellis always seems to think it is coming, but it does not come: the machine can't draw up what is not to be found in the spring: Providence has made him a light-jesting paragraph-writing man, and that he will remain to his dying-day.

"When he is jocular, he is strong; when he is serious, he is like Samson in a wig: any ordinary person is a match for him; a song, an ironical letter, a burlesque ode, an attack in the newspaper upon Nicholl's eyes, a smart speech of twenty minutes, full of gross misrepresentations and clever turns, excellent language, a spirited manner, lucky quotation, success in provoking dull men, some half information picked up in Pall Mall in the morning—these are your friend's natural weapons; all these things he can do; here I allow him to be truly great; nay, I will be just, and go still farther—if he would confine himself to these things, and consider the facile and the playful to be the basis of his character, he would, for that species of man, be universally allowed to be a person of a very good understanding: call him a legislator, a reasoner, and the conductor of the affairs of a great nation, and it seems to me as absurd as if a butterfly were to teach bees to make honey. That he is an extraordinary writer of small poetry, and a diner-out of the highest order, I do most readily admit. After George Selwyn, and perhaps Tickell, there has been no such man for this half century."

But in this passage our incomparable friend was unconsciously giving point and currency to the very objections often urged against himself, and which always are urged against every wit or man of genius who has the misfortune to startle dullness from its self-complacency. How long did it not take, in his own case, to compel the universal admission that his

own exquisite humor was the finest product of sense and reason—the steel point of the feathered shaft that went swift and unerring to the mark? At the same time, we must make ample allowance for the asperity which was conventionally permitted to combatants, with tongue or pen, fifty years since. Let it also be remembered that, if Sydney Smith did not spare Canning or his "parasites," Canning had not spared some of Sydney Smith's dearest and most esteemed friends; and, in reviving the memory of their swashing blows at the distance of half a century, we feel the same admiration for the wit and wisdom displayed on either side, irrespective of personal and party motives, as we do in reverting to Dryden's portrait of Achitophel or Pope's sketch of Sporus. In a retrospective view of satirical literature which throws a vivid light on political and social history, it matters little whether any given specimen of irony or invective was aimed by a Whig at a Tory, or by a Tory at a Whig.

The world is a jealous world, and reluctantly accords the palm in more than one line of superiority or walk of excellence to the same competitor. If Canning had not shone in light literature, or "small poetry," his claim to rank as an orator of the first class would have been conceded long prior to 1808. If his other titles to fame had not subsequently merged and been forgotten in his career as a statesman, we should not now be under the necessity of asserting his independent and distinct right to rank as a man of letters; for could all his contributions to light literature be collected, he would be admitted to fall short of few political satirists of the more fugitive order in grace, point, or felicity, and to equal the best of them in fecundity and variety. And this we say with especial reference to Swift; Sir Charles Hanbury Williams, the author of *Anticipation*, (Tickell,) and the other principal contributors to the *Rolliad*; Peter Pindar, Gifford, Theodore Hook, and Thomas More, who, we think, is more indisputably the first in this order of composition than in any other which he touched and adorned.

The importance not long since attached to Latin prosody and the artistical combination of longs and shorts, was hardly exaggerated in the witty remark, that a false quantity in a man was pretty nearly

tantamount to a *faux pas* in a woman. The Marquis of Wellesley would appear, from his private correspondence, to have been prouder of his Latin verses than of his Indian policy; and the late Lord Tenterden devoted more of his long vacation to the polishing of his odes in the language and manner of Horace, than to the consolidation of statutes or preparation of judgments. In their younger days, which were also Canning's, graceful scholarship was a high social and literary distinction in itself. But notwithstanding the brilliant example set by Sir George Lewis and Mr. Gladstone, the class within which the taste and the capacity for these pursuits are still cultivated has gradually become more select than numerous, and the fame of any modern statesman would be deemed equivocal if it required to be supported or enhanced by a school exercise or a prize poem. We therefore lay no stress on Canning's contributions to the *Musæ Etonenses*; but we pause at the *Microcosm*, which, though the production of boyhood, contains many passages which would reflect no discredit on the most accomplished mind in its maturity.

The formal title of the collected papers runs thus: "*The Microcosm, a Periodical Work, by Gregory Griffin, of the College of Eton.*" Inscribed to the Rev. Dr. Davies. In two volumes." It consists of a series of papers after the manner of the *Spectator*, published weekly, (on the Monday,) from Nov. 6, 1786, to July 30, 1787, both inclusive. The concluding number contains the will of the editor, Mr. Gregory Griffin, by which he bequeaths "the whole of the aforesaid essays, poems, letters, etc., etc., to my much-beloved friends, J. Smith, G. Canning, R. Smith, and J. Frere, to be among them divided as shall be hereafter by me appointed, except such legacies as shall be hereafter by me assigned to other my worthy and approved friends." Amongst the special bequests we find: "Item. To Mr. George Canning, now of the College of Eton, I do give and bequeath all my papers, essays, etc., etc., signed with B." The best of these are No. 2, on Swearing; Nos. 11 and 12, Critique on the Heroic Poem of the Knave of Hearts; and No. 30, on Mr. Newbery's Little Books, including a parallel between the character of Tom Thumb and that of Ulysses. Each of these is remarkable for an easy and abundant flow of humor, with (to borrow one of Dr. John-

son's expressions) a bottom of good sense. The subject of Swearing was judiciously chosen; and its importance is heightened with a comic seriousness which would have provoked an approving smile from the Short-faced Gentleman, obviously proposed as a model by the youthful essayist. For example:

"It is an old proverbial expression, that 'there go two words to a bargain;' now I should not a little admire the ingenuity of that calculator who could define, to any tolerable degree of exactness, how many oaths go to one in these days: for I am confident that there is no business carried on, from the wealthiest bargains of the Exchange, to the six-penny chafferings of a St. Giles's huckster, in which swearing has not a considerable share. And almost every tradesman, 'meek and much a liar,' will, if his veracity be called in question, coolly consign to Satan some portion of himself, payable on demand, in case his goods be not found answerable to his description of their quality.

"Nay, even the female sex have, to their no small credit, caught the happy contagion; and there is scarce a mercer's wife in the kingdom but has her innocent unmeaning imprecations, her little oaths 'softened into nonsense,' and, with squeaking treble, mincing blasphemy into odesobdiks, slitterkins, and such like, will 'swear you like a sucking dove, ay, an it were any nightingale.'"

It was Swift, we believe, who, happening to be present when a party of accomplished friends were eagerly talking over a game at cards, completed and presented them with an estimate of the proportion which their oaths bore to the rational or intelligible portion of their discourse. Hotspur tells his wife that she swears like a comfit-maker's wife; and Bob Acres' theory of sentimental swearing must have been freshly remembered in 1787. Yet there is both novelty and ingenuity in Canning's mode of enforcing the same argument; and the recollection of Addison's commentary on *Chevy Chase* rather enhances the pleasure with which we read his youthful imitator's critical analysis of what he designates the epic poem beginning:

"The queen of hearts
She made some tarts
All on a summer's day."

If self-love did not blind the best of us to our own errors and absurdities, almost every modern editor or commentator who has aspired to emulate the conjectural, and often happy, audacity of Warburton, might fancy that the quiet irony of the

following paragraph was leveled at himself :

"All on a summer's day."

"I can not leave this line without remarking, that one of the Scribleri, a descendant of the famous Martinus, has expressed his suspicions of the text being corrupted here, and proposes, instead of 'All on,' reading 'Alone,' alleging, in the favor of this alteration, the effect of solitude in raising the passions. But Hiccius Doctius, a high Dutch commentator, one nevertheless well versed in British literature, in a note of his usual length and learning, has confuted the arguments of Scriblerus. In support of the present reading, he quotes a passage from a poem written about the same period with our author's, by the celebrated Johannes Pastor, (most commonly known as Jack Shepherd,) entitled 'An Elegiac Epistle to the Turnkey of Newgate,' wherein the gentleman declares, that rather indeed in compliance with an old custom, than to gratify any particular wish of his own, he is going

"——— All hanged for to be
Upon that fatal Tyburn tree."

"Now, as nothing throws greater light on an author than the concurrence of a contemporary writer, I am inclined to be of Hiccius's opinion, and to consider the 'All' as an elegant expletive, or as he more aptly phrases it, 'elegans expletivum.'"

There are several other papers, from which, space permitting, we should be glad to quote; and although Canning's are the gems of the publication, it may be cited as a whole to show how rapidly the tone, or what some may call the cant, of the professional essayist or critic may be caught, and how effectively it may be employed by the youngest tyro in the art. It is hardly conceivable that lads of sixteen or seventeen can have thought out for themselves, or fully appreciated, the conclusions they lay down or the canons they apply; yet there is little in their writings by which they could be distinguished from their elders of the same average rate of talent, except what is to their advantage, namely, their superior freshness and vivacity. Just so, it is a remarkable fact, that the best of our comedies, commonly supposed to show the nicest insight into life and manners, have been produced by their respective authors at an age when they must have taken most of their applauded knowledge of society upon trust. We hear much of the intuitive powers of genius, and it certainly does sometimes arrive at surprising results by intellectual processes

which seem to dispense with experience. But examination and analysis may possibly suggest a simpler solution, by demonstrating that the knowledge in question really amounts to little more than cleverness in tracing character and conduct to motives and springs of action which do least credit to mankind. "What knowledge of life!" exclaim pit and boxes, when Mrs. Candor and Sir Benjamin Backbite are turning their intimate acquaintance into ridicule, or when Mirabell tells Millamant that "a man may as soon make a friend by his wit, or a fortune by his honesty, as win a woman with plain dealing and sincerity." Yet a diligent perusal of works like *Rochefoucauld's Maxims*, or *Grammont's Memoirs*, may supply ample materials for the creation of these fine gentlemen, coquettes, and scandal-mongers, whose conventional and heartless cynicism derives its essential piquancy from the expression and the form.

"Broad is the road, nor difficult to find,
Which to the house of Satire leads mankind;
Narrow and unfrequented are the ways,
Scarce found out in an age, which lead to Praise."

We can hardly say of Canning's satire what was said of Sheridan's, that

"His wit in the combat, as gentle as bright,
Never carried a heart-stain away on its blade."

But its severity was redeemed by its buoyancy and geniality, whilst the subjects against which it was principally aimed gave it a healthy tone and a sound foundation. Its happiest effusions will be found in the *Anti-Jacobin* which was set on foot to refute or ridicule the democratic rulers of Revolutionary France and their admirers or apologists in England, who, it must be owned, were occasionally hurried into a culpable degree of extravagance and laxity by their enthusiasm. The first number of this celebrated publication appeared on November 7, 1797; the thirty-sixth and last on July 9, 1798. The collected numbers in prose and verse form two volumes octavo. The poetry was reprinted in a separate volume in 1799; and this volume has since been edited, with explanatory notes, by Mr. Charles Edmonds, who brought acuteness, discrimination, an appreciating spirit, and the most exemplary diligence to the performance of his task. He has taken ex-

traordinary pains to ascertain the authorship, whether joint or several, of the contributions, yet he had evidently not been able to satisfy himself, and he certainly has not satisfied us, on this most important and interesting point. The chief difficulty arises from the discrepancy between the oral and traditional, the internal and the written, evidence. Opposite to the title of each contribution in the table of contents, Mr. Edmonds has placed the name or names of the supposed writer or writers. The authorities on which he relies are four: "Canning's own copy of the poetry; Lord Burghersh's copy; Wright the publisher's copy; information of W. Upcott, amanuensis." The following curious account, printed between inverted commas, is subjoined to the table of contents:

"Wright, the publisher of the *Anti-Jacobin*, lived at 169, Piccadilly, and his shop was the general morning resort of the friends of the ministry, as Debrett's was of the Oppositionists. About the time when the *Anti-Jacobin* was contemplated, Owen, who had been the publisher of Burke's pamphlets, failed. The editors of the *Anti-Jacobin* took his house, paying the rent, taxes, etc., and gave it up to Wright, reserving to themselves the first floor, to which a communication was opened through Wright's house. Being thus enabled to pass to their own rooms through Wright's shop, where their frequent visits did not excite any remarks, they contrived to escape particular observation.

"Their meetings were most regular on Sundays, but they not unfrequently met on other days of the week, and in their rooms were chiefly written the poetical portions of the work. What was written was generally left open upon the table, and as others of the party dropped in, hints or suggestions were made; sometimes whole passages were contributed by some of the parties present, and afterwards altered by others, so that it is almost impossible to ascertain the names of the authors.

"Gifford was the working editor, and wrote most of the refutations and corrections of the 'Lies,' 'Mistakes,' and 'Misrepresentations.' The papers on finance were chiefly by Pitt: the first column was frequently for what he might send; but his contributions were uncertain, and generally very late, so that the space reserved for him was sometimes filled up by other matter. He only once met the editors at Wright's. Upcott, who was at the time assistant in Wright's shop, was employed as amanuensis, to copy out for the printer the various contributions, that the authors' handwriting might not be detected."

The editor, speaking in his own proper person, continues:

"For the above interesting particulars, as well

as for most of the names of the authors, the public are indebted to the researches of E. Hawkins, Esq., of the British Museum.

"It is probable, notwithstanding Lord Burghersh's assertion, that Mr. Hammond did not write one line, certainly not of verse. With regard to Mr. Wright's appropriation of particular passages to different authors, it is obviously mere conjecture. Both Canning and Gifford professed not to be able to make such distribution; but the former's share of 'New Morality' was so very much the largest as to entitle him to be considered its author."

We learn from Mr. Edmonds that almost all his authorities practically resolve themselves into one, the late Mr. Upcott, and that he never saw either of the alleged copies on which his informant relied. As regards the principal one, Canning's own, after the fullest inquiries amongst his surviving relatives and friends (with the exception of the Governor-General of India) we can not discover a trace of its existence at any period. Lord Burghersh (the present Earl of Westmoreland) was under fourteen years of age during the publication of the *Anti-Jacobin*; and we very much doubt whether either the publisher or the amanuensis (be he who he may) was admitted to the complete confidence of the contributors, or whether either the prose or poetry was composed as stated. In a letter to the late Madam de Girardin, *apropos* of her play, *L'Ecole des Journalistes*, Jules Janin happily exposes the assumption that good leading articles ever were, or ever could be, produced over punch and broiled bones, amidst intoxication and revelry. Equally untenable is the belief that poetical pieces, like the best of the *Anti-Jacobin*, were written in the common rooms of the confraternity, open to constant intrusion, and left upon the table to be corrected or completed by the first comer. The unity of design discernible in each, the glowing harmony of the thoughts and images, and the exquisite finish of the versification, tell of silent and solitary hours spent in brooding over, maturing, and polishing a cherished conception; and young authors, still unknown to fame, are least of all likely to sink their individuality in this fashion. We know, as a matter of fact, that their confidential meetings, to compare notes and talk over suggestions, were really held at Lady Malmesbury's, in Park Place; and we suspect that their main object in going to Wright's was to correct their

proofs and see one another's articles in their more finished state. Their meetings, if for these purposes, would be most regular on Sundays, because the paper appeared every Monday morning. The extent to which they aided one another may be collected from a well-authenticated anecdote. When Frere had completed the first part of the "Loves of the Triangles," he exultingly read over the following lines to Canning, and defied him to improve upon them:

"Lo! where the chimney's sooty tube ascends,
The fair TROCHAI from the corner bends!
Her coal-black eyes upturned, incessant mark
The eddying smoke, quick flame, and volent spark;
Mark with quick ken, where fleshing in between,
Her much-loved *Smoke-Jack* glimmers thro' the scene;
Mark, how his various parts together tend,
Point to one purpose—in one object end;
The spiral grooves in smooth meanders flow,
Drags the long chain, the polished axles glow,
While slowly circumploes the piece of beef below:"

Canning took the pen and added—

"The conscious fire with bickering radiance burns,
Eyes the rich joint, and roasts it as it turns."

These two lines are now blended with the original text, and constitute, we are informed on the best authority, the only flaw in Frere's title to the sole authorship of the First Part. The Second and Third Parts were by Canning.

By the kindness of Lord Hatherton, we have now before us a bound volume containing all the Numbers of *The Anti-Jacobin* as they originally appeared—eight pages quarto, with double columns, price six-pence. On the fly-leaf is inscribed: "This copy belonged to the Marquess Wellesley, and was purchased at the sale of his library after his death, January, 1842. H." On the cover is pasted an engraved label of the arms and name of a former proprietor, Charles William Flint, with the penciled addition of "Confidential Amanuensis." In this copy, Canning's name is subscribed to (amongst others) the following pieces, which are also assigned to him (along with a large share in the most popular of the rest) by the most trustworthy rumors and traditions: "Inscription for the Door of the Cell in Newgate where Mrs. Brownrigg, the Prenticide, was confined previous to her execution;" "The Friend of Humanity and the Knife-Grinder;" the Lines ad-

ressed "To the Author of the Epistle to the Editors of the *Anti-Jacobin*;" "The Progress of Man," (all three parts;) and "New Morality."

With the single exception of "The Friend of Humanity and the Knife-Grinder," no piece in the collection is more freshly remembered than the "Inscription for the Cell of Mrs. Brownrigg," who

"Whipped two female prentices to death,
And hid them in the coal-hole."

The answer to "The Author of the Epistle to the Editors of the *Anti-Jacobin*," is less known, and it derives a fresh interest from the fact, recently made public, that the Epistle (which appeared in the *Morning Chronicle* of Jan. 17, 1798) was the composition of William Lord Melbourne. The beginning shows that the veil of incognito had been already penetrated.

"Whoe'er ye are, all hail!—whether the skill
Of youthful CANNING guides the rancorous quill;
With powers mechanic far above his age,
Adapts the paragraph and fills the page;
Measures the column, mends whate'er's amiss,
Rejects THAT letter, and accepts of THIS;
Or HAMMOND, leaving his official toil,
O'er this great work consume the midnight oil—
Bills, passports, letters, for the Muses quit,
And change dull business for amusing wit."

After referring to "the poetic sage, who sung of Gallia in a headlong rage," the epistle proceeds:

"I swear by all the youths that MALMESBURY
chose,*
By ELLIS' sapient prominence of nose,
By MORPETH's gait, important, proud, and big—
By Leveson Gower's crop-imitating wig,
That, could the powers which in those numbers
shine,
Could that warm spirit animate my line,
Your glorious deeds which humbly I rehearse—
Your deeds should live immortal as my verse;
And, while they wondered whence I caught my
flame,
Your sons should blush to read their fathers'
shame."

Happily the eminent and accomplished sons of these fathers will smile, rather than blush, at this allusion to their sires, and smile the more when they remember from which side the attack proceeded.

* It will be remembered that these eminent persons were chosen by Lord Malmesbury to accompany him on his mission to Lille, and associated with him in the abortive negotiations for peace.

It is clear from the answer, that whilst the band were not a little ruffled by this attack, they had not the remotest suspicion that their assailant was a youth in his nineteenth year. Amongst other prefatory remarks they say :

"We assure the author of the epistle, that the answer which we have here the honor to address to him, contains our genuine and undisguised sentiments upon the merits of the poem.

"Our conjectures respecting the authors and abettors of this performance may possibly be as vague and unfounded as theirs are with regard to the EDITORS of the *Anti-Jacobin*. We are sorry that we can not satisfy their curiosity upon this subject—but we have little anxiety for the gratification of our own.

"It is only necessary to add, what is most conscientiously the truth, that this production, such as it is, is *by far the best* of all the attacks that the combined wits of the cause have been able to muster against the *Anti-Jacobin*."

The answer opens thus :

"BARD of the borrowed lyre ! to whom belong
The shreds and remnants of each hackneyed song ;
Whose verse thy friends in vain for wit explore,
And count but *one good line* in eighty-four !
Whoe'er thou art, all hail ! Thy bitter smile
Gilds our dull page, and cheers our humble toil !"

The "one good line" was "by Leveson Gower's crop-imitating wig," but the Epistle contains many equally good and some better. The speculations as to its authorship must have afforded no slight amusement to the writer and his friends.

The "Progress of Man" is a parody on "The Progress of Civil Society," a didactic poem, in six books, by Mr. Payne Knight, published in 1796. It was strongly imbued with the new philosophy, and awarded a decided superiority to the unsophisticated ways of man in his savage or natural state over the customs and manners (tacitly assumed to be unnatural) of civilization. Like most of the productions mentioned in the *Dunciad*, it is now only redeemed from utter oblivion by the poignant ridicule which it provoked. Mr. Knight's poetical description of the universality of the sexual passion, which he described as "warming the whale on Zembla's frozen shore," is rather imitated and amplified, than exaggerated, in the lines—

"How Lybian tigers' chawdrons love assails,
And warms, midst seas of ice, the melting whales ;
Cools the crimp cod, fierce pangs to perch imparts,
Shrinks shrivelled shrimps, but opens oysters' hearts ;

Then say, how all these things together tend
To one great truth, prime object, and good end ?"

Equally good are the lines in which the placidity of the animal and vegetable races is contrasted (as it actually was by Mr. Payne Knight) with the restlessness of mankind :

"First—to each living thing, whate'er its kind,
Some lot, some part, some station is assigned.
The feathered race with pinions skim the air—
Not so the mackerel, and still less the bear ;
This roams the wood, carnivorous for his prey !
That with soft roe pursues his watery way :
This slain by hunters, yields his shaggy hide ;
That caught by fishers, is on Sundays cried.
But each contented with his humble sphere,
Moves unambitious through the circling year."

Part the second is short, and contains little worth quoting, except the lines in which the gradual growth of the carnivorous tendency in the human species is traced and accounted for. The savage sees a tiger devouring a leveret or a pig, and is forthwith smitten with the desire to do likewise. He first, guided by instinct, constructs a bow and arrow.

"Then forth he fares. Around, in careless play,
Kids, pigs, and lambkins unsuspecting stray ;
With grim delight he views the sportive band,
Intent on blood, and lifts his murderous hand,
Twangs the bent bow—resounds the fateful dart,
Swift-winged, and trembles in a porker's heart."

The concluding part is devoted to Marriage, which Mr. Payne Knight has treated in the manner of Eloisa's famous epistle to Abelard. After an invocation to the South Sea Islands, and a glowing sketch of the happy absence of form with which connubial rites are there celebrated, the parody proceeds :

"Learn hence, each nymph, whose free aspiring mind
Europe's cold laws, and colder customs bind—
Oh ! learn, what Nature's genial laws decree—
What Otahete is, let Britain be !

"Of WHIST or CRIBBAGE mark th' amusing game—
The partners *changing*, but the sport the *same*.
Else would the gamester's anxious ardor cool,
Dull every deal, and stagnant every pool.
—Yet must *one Man*, with one unceasing Wife,
Play the LONG RUBBER of connubial life."

Then comes the inimitable portrait of Adelaide, in "The Stranger :"

"With look sedate, and staid beyond her years,
In matron weeds a Housekeeper appears.

The jingling keys her comely girdle deck—
 Her kerchief colored, and her apron check.
 Can that be Adelaide, that 'soul of whim,'
 Reformed in practice, and in manner prim?
 —On household cares intent, with many a sigh
 She turns the pancake, and she moulds the pie;
 Melts into sauces rich the savory ham;
 From the crushed berry strains the lucid jam;
 Bids brandied cherries, by infusion slow,
 Imbibe new flavor, and their own forego,
 Sole cordial of her heart, sole solace of her woe!
 While still, responsive to each mournful moan,
 The saucepan simmers in a softer tone."

In taking up Frere's conception of "The Loves of the Triangles," Canning might have been encouraged by the example of Addison, who borrowed, or wrested, Sir Roger de Coverley from Steele. The second part of this poem is principally remarkable for the airy grace and fineness of touch with which the abstract is invested with the qualities of the concrete and sentient. The object of affection to the rival curves, who display their feelings in the lines we are about to quote, is "The Phœnician Cone," thus mentioned in a note:

"*Phœnician Cone.*—It was under this shape that Venus was worshiped in Phœnicia. Mr. HIGGINS thinks that it was the *Venus Urania*, or Celestial Venus; in allusion to which, the Phœnician grocers first introduced the practice of preserving sugar-loaves in blue or sky-colored paper—he also believes that the conical form of the original grenadier's cap was typical of the loves of Mars and Venus."

This is the shape, being, or entity, whose favors are emulously sought by Parabola, Hyperbola, and Ellipsis; like the three goddesses contending for the apple, and with equal freedom from prudery:

"And first, the fair PARABOLA behold,
 Her timid arms, with virgin blush, unfold!
 Though, on one focus fixed, her eyes betray
 A heart that glows with love's resistless sway;
 Though, climbing oft, she strives with bolder grace
 Round his tall neck to clasp her fond embrace,
 Still ere she reach it, from his polished side
 Her trembling hands in devious *Tangents* glide.

"Not thus HYPERBOLA: with subtlest art
 The blue-eyed wanton plays her changeful part;
 Quick as her *conjugated axes* move
 Through every posture of luxurious love,
 Her sportive limbs with easiest grace expand;
 Her charms unvalled provoke the lover's hand:
 Unvalled, except in many a filmy ray,
 Where light *Asymptotes* o'er her bosom play,
 Nor touch her glowing skin, nor intercept the day.

"Yet why, ELLIPSIS, at thy fate repine?
 More lasting bliss, securer joys are thine.

Though to each fair his treacherous wish may
 stray,
 Though each, in turn, may seize a transient sway,
 'Tis thine with mild coercion to restrain,
 Twine round his straggling heart, and bind with
 endless chain."

Thus, continues the poem, three directors woo the young republic's virgin charms: thus three sister witches hailed Macbeth: thus three Fates weave the woof: thus three Graces attire Venus: thus three daughters form the happiness or misery of Lear: and, lastly,

"So down thy hill, romantic Ashbourn, glides
 The Derby dilly, carrying *Three INSIDES*."

When the Late Mr. O'Connell applied these celebrated lines to the present Earl of Derby, he made the dilly carry six insides, which had the double advantage of describing the vehicle more accurately, and of giving additional point to the joke.

The "Rolliad," it will be remembered, consists of extracts from a supposed poem, interspersed with notes and commentaries. This plan is imitated in the third and last part of "The Loves of the Triangles," which does not profess to be more than the concluding lines of a canto, describing "The Loves of the Giant Isosceles, and the picture of the Asses-Bridge and its several illustrations." London Bridge is one of these illustrations, and the Bridge of Lodi another.

"So towering Alp! from thy majestic ridge*
 Young Freedom gazed on Lodi's blood-stained
 Bridge;
 Saw in thick throngs, conflicting armies rush,
 Ranks close on ranks, and squadrons squadrons
 crush;
 Burst in bright radiance through the battle storm,
 Waved her broad hands, displayed her awful form;
 Bade at her feet regenerate nations bow.
 And twined the wreath round BONAPARTE'S
 brow."

"* *Alp*, or *Alps*.—A ridge of mountains which separate the North of Italy from the South of Germany. They are evidently primeval and volcanic, consisting of granite, toadstone, and basalt, and several other substances, containing animal and vegetable recrements, and affording numberless undoubted proofs of the infinite antiquity of the earth, and of the consequent falsehood of the Mosaic chronology."

It will be collected from this note that the momentous question involved in the case of Moses against Murchison, was

raised long before the ingenious founder of the Silurian system began to disturb or affright the more narrow-minded portion of the clerical body. We fancy, moreover, that in young Freedom gazing from the majestic ridge, we discern the outline of one of the finest apostrophes in *Childe Harold*:

"Lo, where the Giant on the mountain stands,"

But, to give every body his due, it should be added that two lines in the foregoing extract are suggested by—

"As some tall cliff that lifts its awful form,
Swells from the vale, and midway leaves the storm."

The same, the finest, passage of "The Deserted Village" appears to have haunted Canning from his youth upwards. The concluding lines of his juvenile poem entitled *The Slavery of Greece* are a weak paraphrase of it:

"So some tall rock whose bare, broad bosom high
Towers from the earth, and braves th' inclement
sky;

On whose vast top the blackening deluge pours,
At whose wide base the thundering ocean roars,
In conscious pride its huge gigantic form
Surveys imperious and defies the storm."

This is one of the strongest instances of unconscious plagiarism—for it must have been unconscious—that we remember.

In the parody, "the imps of murder" are busily employed in building ships for the invasion of England, whilst to another troop is assigned an equally congenial and appropriate duty:

"Ye Sylphs of DEATH! on demon pinions flit
Where the tall Guillotine is raised for PITT:
To the poised plank tie fast the monster's back,
Close the nice slider, ope the expectant sack;
Then twitch, with fairy hands, the frolic pin—
Down falls the impatient axe with deafening din;
The liberated head rolls off below,
And simpering Freedom hails the happy blow!"

Lord Jeffrey, as we are reminded by Mr. Edmonds, terms "The Loves of the Triangles," the perfection of parody. "All the peculiarities," he remarks, "of the original poet are here brought together and crowded into a little space, where they can be compared and estimated with ease."

Darwin thus addresses the gnomes:

"Gnomes, as you now dissect, with hammers fine,
The granite rock, the noduled flint calcine;

Grind with strong arm the circling Chertz betwixt,
Your pure Ka—o—lins and Pe—tunt—ses mixt."

The authors have certainly placed in broad relief the essential error of Dr. Darwin's poetic theory, his mania for personification, his wearisome and laughter-moving trick of investing with the qualities of sentient beings the entire vegetable creation, as well as every abstract notion, and almost every noun-substantive that crossed his mind. The tendency of the political and social doctrines with which he seasoned his verse, is also justly and pointedly exposed. But, considered merely as a parody, Canning's part is open to the objection that it occasionally strikes too high a key, and awakens finer and more elevated associations than were, or could have been, evoked by the original. The cherub crew who "their mimic task pursue," in "The Loves of the Triangles," bear a much closer resemblance to the sylphs who kept watch and ward around Belinda's toilet-table, than to the gnomes at work on "noduled flint." They recall the "Rape of the Lock," rather than the "Loves of the Plants;" and we can not accept as a perfect caricature of Dr. Darwin a production which, in so short a space, anticipates Byron, paraphrases Goldsmith, and employs, without tarnishing, the delicate machinery of Pope.

"New Morality" is commonly regarded as the masterpiece of the *Anti-Jacobin*; and, with the exception of a few lines, the whole of it is by Canning.

It appeared in the last Number, and he is said to have concentrated all his energies for a parting blow. The reader who comes from fresh from Dryden or Pope, or even Churchill, will be disappointed on finding far less variety of images, sparkling antithesis, or condensed brilliancy of expression. The author exhibits abundant humor and eloquence, but comparatively little wit; if there be any truth in Sydney Smith's doctrine "that the feeling of wit is occasioned by those relations of ideas which excite surprise, and surprise *alone*." We are commonly prepared for what is coming, and our admiration is excited rather by the justness of the observations, the elevation of the thoughts, and the vigor of the style, than by a startling succession of flashes of fancy. If, as we believe, the same might be said of Juvenal, and the best of his

English imitators, Johnson, we leave ample scope for praise; and "New Morality" contains passages which have been preserved to our time, and bid fair to reach posterity, by their poetry and truth. How often are the lines on Candor quoted in entire ignorance or forgetfulness of their author:

"'Much may be said on both sides.'—Hark, I hear

A well-known voice that murmurs in my ear—
The voice of CANDOR. Hail! most solemn sage,
Thou driveling virtue of this moral age,
CANDOR; which softens party's headlong rage.
CANDOR, which spares its foes; nor e'er descends
With bigot zeal to combat for its friends.

CANDOR, which loves in see-saw strain to tell
Of acting foolishly, but meaning well;
Too nice to praise by wholesale, or to blame,
Convinced that all men's motives are the same;
And finds, with keen discriminating sight,
BLACK'S not so black—nor WHITE so very white.

"'Fox, to be sure, was vehement and wrong:
But then, PITT's words, you'll own, were rather strong.

Both must be blamed, both pardoned; 'twas just so

With FOX and PITT full forty years ago!
So WALPOLE, PULTENEY; factions in all times
Have had their follies, ministers their crimes.'

"Give me th' avowed, th' erect, the manly foe,
Bold I can meet—perhaps may turn his blow;
But of all plagues, good Heaven, thy wrath can send,

Save, save, oh! save me from the *Candid Friend*!"

After reading these lines, we readily make up our minds, at the author's bidding, to distrust the next person who attempts to mitigate our censure or our praise; although we may be really giving full indulgence to a prejudice, which a very small allowance of Christian charity, self-examination, or genuine unsophisticated candor, would correct. The dangerous tendency of the doctrine is immediately afterwards shown by its application:

"I love the bold uncompromising mind,
Whose principles are fixed, whose views defined:

Who owns, when Traitors feel th' avenging rod,
Just retribution, and the hand of God;
Who hears the groans through Oimûts' roofs that ring,

Of him who mocked, misled, betrayed his king—
Hears unappalled, though Faction's zealots preach,
Unmoved, unsoftened by FITZPATRICK'S Speech."

So, to show defiance of canting candor, we are required to hear unmoved the groans of a pure-minded and well-inten-

tioned, however mistaken, patriot in a foreign prison. According to M. Guizot, (in his Memoirs,) Charles X. observed after his accession to the throne, that the only two persons who had not changed since 1789 were Lafayette and himself. Early in his revolutionary career, the general was nicknamed the Grandison Cromwell. Brave, honest, consistent, but vain, weak, and credulous, he was little better than a puppet in the hands of the principal actors of the scenes in which he played so conspicuous a part. We can, therefore, understand the refusal of sympathy to such a man when he is punished by exile for having been an instrument in the hands of the enemies of social order and rational freedom. But to exult in his imprisonment and separation from his wife, is to prove how easily party prejudice may be confounded with "innate sense of right," and how necessary it is for the best of us to probe our likings and dislikings to their source.

Ten lines on the British oak have been traditionally attributed to Pitt:

"So thine own oak, by some fair streamlet's side
Waves its broad arms, and spreads its leafy pride,
Towers from the earth, and rearing to the skies
Its conscious strength, the tempest's wrath defies:
Its ample branches shield the fowls of air,
To its cool shade the panting herds repair.
The treacherous current works its noiseless way,
The fibres loosen, and the roots decay;
Prostrate the beauteous ruin lies; and all
That shared its shelter, perish in its fall."

It seems to have been a fixed maxim with the controversialists of those days to consider all who were not with them as against them, and this satire denounces with indiscriminating severity all who, at home or abroad, on the political or literary arena, had manifested the slightest leaning towards the new philosophy, or were even in habits of friendly intercourse with its votaries. It is also rather startling, contrasted with modern amenities, to find "Neckar's fair daughter," who said she would give all her fame for the power of fascinating, introduced as—

"Stæll, the Epicene!
Bright o'er whose flaming cheek and purple nose
The bloom of young desire unceasing glows."

Nor, much as Talleyrand's reputation has declined of late years, and low as his political honesty stood at all times, would any thing be now thought to justify such a diatribe as—

"Where at the blood-stained board expert he
plies,
The lame artificer of fraud and lies ;
He with the mitred head and cloven heel—
Doomed the coarse edge of REWBELL'S jests to feel ;
To stand the playful buffet, and to hear
The frequent ink-stand whizzing past his ear ;
While all the five Directors laugh to see
'The limping priest so deft at his new ministry.'"

According to a current story, Rewbell, exasperated by Talleyrand's opposition at council, flung an inkstand at his head, exclaiming: "*Vil Emigré, tu n'as pas le sens plus droit que le pied.*" In the center of the troop who are introduced singing the praises of Lepaux, were inconsiderately placed a group of writers, who, with equal disregard of their respective peculiarities and opinions, were subsequently lumped together as the Lake School:

"And ye five other wandering bards, that move
In sweet accord of harmony and love,
COLERIDGE and SOUTHEY, LLOYD, and LAMB & Co.,
Tune all your mystic harps to praise LEPAUX!"

Talfourd, in his *Life of Lamb*, justly complains of Elia's being accused of new theories in morality, which he detested, or represented as offering homage to "a French charlatan of whose existence he had never heard." In allusion to the same passage, Southey writes to the late Mr. Charles Wynn, August 15th, 1798:

"I know not what poor Lamb has done to be croaking there. What I think the worst part of the *Anti-Jacobin* abuse is the lumping together men of such opposite principles; this was stupid. We should have all been welcoming the Director, not the Theophilanthrope. The conductors of the *Anti-Jacobin* will have much to answer for in thus inflaming the animosities of this country. They are laboring to produce the deadly hatred of Irish faction; perhaps to produce the same end."

The drama of "The Rovers," or "Double Arrangement," was written to ridicule the German Drama, then hardly known in this country, except through the medium of bad translations of some of the least meritorious of Schiller's, Goethe's, and Kotzebue's productions. The parody is now principally remembered by Rogers's song, of which, Mr. Edmonds states, the first five stanzas were by Mr. Canning. "Having been accidentally seen, previously to its publication, by Mr. Pitt, he was so amused with it that he took a pen and composed the last stanza on the spot." To save our readers the trouble of reference, we quote it entire:

I.

"Whene'er with haggard eyes I view
This dungeon that I'm rotting in,
I think of those companions true
Who studied with me at the U—
—niversity of Gottingen—
—niversity of Gottingen."

II.

"Sweet kerchief, checked with heavenly blue,
Which once my love sat knotting in!
Alas! Matilda then was true!
At least I thought so at the U—
—niversity of Gottingen—
—niversity of Gottingen."

III.

"Barbs! Barbs! alas! how swift you flew
Her neat post-wagon trotting in!
Ye bore Matilda from my view;
Forlorn I languished at the U—
—niversity of Gottingen—
—niversity of Gottingen."

IV.

"This faded form! this pallid hue!
This blood my veins is clotting in,
My years are many—they were few
When first I entered at the U—
—niversity of Gottingen—
—niversity of Gottingen."

V.

"There first for thee my passion grew,
Sweet, sweet Matilda Pottingen!
Thou wast the daughter of my tu—
—tor, law professor at the U—
—niversity of Gottingen—
—niversity of Gottingen."

VI.

"Sun, moon, and thou vain world, adieu,
That kings and priests are plotting in:
Here doomed to starve on water gru—
—el, never shall I see the U—
—niversity of Gottingen—
—niversity of Gottingen."

Canning's reputed hares in "The Rovers" excited the unreasoning indignation, and provoked the exaggerated censure, of a man who has obtained a world-wide reputation by his historical researches, most especially by his alleged skill in separating the true from the fabulous, and in filling up chasms in national annals by a process near akin to that by which Cuvier inferred the entire form and structure of an extinct species from a bone. The following passage is taken from Niebuhr's *History of the Period of the Revolution*, (published from his Lectures, in two volumes, in 1845:)

"Canning was at that time (1807) at the head of foreign affairs in England. History will not form the same judgment of him as that formed by contemporaries. He had great talents, but was not a great statesman; he was one of those persons who distinguish themselves as the squires of political heroes. He was highly accomplished in the two classical languages, but without being a learned scholar. He was especially conversant with Greek writers. He had likewise poetical talent, but only for satire. At first he had joined the leaders of opposition against Pitt's ministry; Lord Grey, who perceived his ambition, advised him, half in joke, to join the ministers, as he would make his fortune. He did so, and was employed to write articles for the newspapers, and satirical verses, which were often directed against his former benefactors.

"Through the influence of the ministers he came into Parliament. So long as the great eloquence of former times lasted, and the great men were alive, his talent was admired; but older persons had no great pleasure in his petulant epigrammatic eloquence and his jokes, which were often in bad taste. He joined the Society of the Anti-Jacobins, which defended every thing connected with existing institutions. This society published a journal, in which the most honored names of foreign countries were attacked in the most scandalous manner. German literature was at that time little known in England, and it was associated there with the ideas of Jacobinism and revolution. Canning then published in the *Anti-Jacobin* the most shameful pasquinade which was ever written against Germany, under the title of 'Matilda Pottingen.' Göttingen is described in it as the sink of all infamy; professors and students as a gang of miscreants; licentiousness, incest, and atheism as the character of the German people. Such was Canning's beginning; he was at all events useful; a sort of political Cossack."—*Geschichte des Zeitalters der Revolution*, vol. ii. p. 242.

"Here am I," exclaimed Raleigh, after vainly trying to get at the rights of a squabble in the courtyard of the Tower, "employed in writing a true history of the world, when I can not ascertain the truth of what happens under my own window." Here is the great restorer of Roman history—who, by the way, prided himself on his knowledge of England—hurrying into the strangest misconception of contemporary events and personages, and giving vent to a series of depreciatory misstatements without pausing to verify the assumed groundwork of his patriotic wrath. His description of "the most shameful pasquinade," and his ignorance of the very title, prove that he had never seen it. If he had, he would also have known that the scene is laid at Weimar, not at Göttingen; and that the satire is

almost exclusively directed against a portion of the dramatic literature of his country, which all rational admirers must admit to be indefensible. The scene in "The Rovers," in which the rival heroines, meeting for the first time at an inn, swear eternal friendship and embrace, is positively a feeble reflection of a scene in Goethe's *Stella* and no anachronism can exceed that in Schiller's *Cabal und Liebe*, when Lady Milford, after declaring herself the daughter of the Duke of Norfolk who rebelled against Queen Elizabeth, is horrified on finding that the jewels sent her by the Grand Duke have been purchased by the sale of 7000 of his subjects, to be employed in the American war.*

Amongst the prose contributions to the *Anti-Jacobin*, there is one in which, independently of direct evidence, the peculiar humor of Canning is discernible—the pretended report of the meeting of the Friends of Freedom at the Crown and Anchor Tavern. The plan was evidently suggested by Tickell's "Anticipation," in which the debate on the Address at the opening of the Session was reported beforehand with such surprising foresight, that some of the speakers, who were thus forestalled, declined to deliver their meditated orations.

At the meeting of the Friends of Freedom, Erskine, whose habitual egotism could hardly be caricatured, is made to perorate as follows:

"MR. ERSKINE concluded by recapitulating, in a strain of agonizing and impressive eloquence, the several more prominent heads of his speech: He had been a soldier and a sailor, and had a son at Winchester School—he had been called by special retainers, during the summer, into many different and distant parts of the country—travel-

* It is surprising that the satirist's attention was not attracted to the scene in *Stella*, in which one of the heroines describes the rapid growth of her passion to its object: "I know not if you observed that you had enchained my interest from the first moment of our first meeting. I at least soon became aware that your eyes sought mine. Ah! Fernando, then my uncle brought the music, you took your violin, and, as you played, my eyes rested upon you free from care. I studied every feature of your face; and, during an unexpected pause, you fixed your eyes upon—upon me! They met mine! How I blushed, how I looked away! You observed it, Fernando; for from that moment I felt that you looked oftener over your music-book, often played out of tune, to the disturbance of my uncle. Every false note, Fernando, went to my heart. It was the sweetest confusion I ever felt in my life."

ing chiefly in post-chaises—he felt himself called upon to declare that his poor faculties were at the service of his country—of the free and enlightened part of it at least—he stood here as a man—he stood in the eye, indeed in the hand, of God—to whom (in the presence of the company and waiters) he solemnly appealed—he was of noble, perhaps, Royal Blood—he had a house at Hampstead—was convinced of the necessity of a thorough and radical Reform—his pamphlet had gone through thirty editions skipping alternately the odd and even numbers—he loved the Constitution, to which he would cling and grapple—and he was clothed with the infirmities of man's nature—he would apply to the present French rulers (particularly BARRAS and REUBEL) the words of the poet :

'Be to their faults a little blind ;
Be to their virtues very kind,
Let all their ways be unconfined,
And clap the padlock on their mind !'

And for these reasons, thanking the gentlemen who had done him the honor to drink his health, he should propose 'MERLIN, the late Minister of Justice, and Trial by Jury.'

A long speech is given to Mackintosh, who, under the name of Macfungus, after a servid sketch of the Temple of Freedom which he proposes to construct on the ruins of ancient establishments, proceeds with kindling animation :

"There our infants shall be taught to lip in tender accents the Revolutionary Hymn—there with wreaths of myrtle, and oak, and poplar, and vine, and olive, and cypress, and ivy ; with violets and roses, and daffodils and dandelions in our hands, we will swear respect to childhood, and manhood, and old age, and virginity, and womanhood, and widowhood ; but, above all, to the Supreme Being.

"These prospects, fellow-citizens, may possibly be deferred. The Machiavelism of Governments may for the time prevail, and this unnatural and execrable contest may yet be prolonged ; but the hour is not far distant ; Persecution will only serve to accelerate it, and the blood of patriotism streaming from the severing axe, will call down vengeance on our oppressor in a voice of thunder. I expect the contest, and I am prepared for it. I hope I shall never shrink, nor swerve, nor start aside, wherever duty and inclination may place me. My services, my life itself, are at your disposal—whether to act or to suffer, I am yours—with HAMPDEN in the Field, or with SIDNEY on the Scaffold. My example may be more useful to you than my talents : and this head may perhaps serve your cause more effectually, if placed on a pole upon Temple Bar, than if it was occupied in organizing your committees, in preparing your revolutionary explosions, and conducting your correspondence."

The wit and fun of these imitations are undeniable ; and their injustice is equally so, Erskine, with all his egotism, was and remains the greatest of English advocates. He stemmed and turned the tide which threatened to sweep away the most valued of our free institutions in 1794 ; and (we say with Lord Brougham) "before such a precious service as this, well may the lustre of statesmen and orators grow pale." Mackintosh was preëminently distinguished by the comprehensiveness and moderation of his views ; nor could any man be less disposed by temper, habits, or pursuits towards revolutionary courses. His Lectures on the Law of Nature and Nations were especially directed against the new morality in general, and Godwin's Political Justice in particular.

At a long subsequent period, (1807,) Canning, when attacked in Parliament for his share in the *Anti-Jacobin*, declared that "he felt no shame for its character or principles, nor any other sorrow for the share he had had in it, than that which the imperfection of his pieces was calculated to inspire." Still, it is one of the inevitable inconveniences of a connection with the press, that the best known writers should be made answerable for the errors of their associates ; and the license of the *Anti-Jacobin* gave serious and well-founded offense to many who shared its opinions and wished well to its professed object. In Wilberforce's Diary for May 18, 1799, we find : "Pitt, Canning, and Pepper Arden came in late to dinner. I attacked Canning on indecency of *Anti-Jacobin*. Coleridge, in his *Biographia Literaria* complains bitterly of the calumnious accounts given by the *Anti-Jacobin* of his early life, and asks with reason, "Is it surprising that many good men remained longer than perhaps they otherwise would have done, adverse to a party which encouraged and openly rewarded the authors of such atrocious calumnies ?"

Mr. Edmonds says that Pitt got frightened, and that the publication was discontinued at the suggestion of the Prime-Minister. It is not unlikely that Canning, now a member of the House of Commons and Under-Secretary of State for Foreign Affairs, found his connection with it embarrassing, as his hopes rose and his political prospects expanded. Indeed, it may be questioned whether a parliament-

ary career can ever be united with that of the daily or weekley journalist, without compromising one or both. At all events, the original *Anti-Jacobin* closed with the number containing "New Morality," and Canning had nothing to do with the monthly review started under the same name.

During the Addington administration, his muse was more than ordinarily fertile, as we had recently occasion to remark in commenting on the part taken by Mr. Pitt and his friends in the transactions of that period. Besides the celebrated song of "the Pilot that weathered the Storm," composed for the first meeting of the Pitt Club, he poured forth squib after squib against "The Doctor," interspersed with an occasional hit at the indifference, real or assumed, of Pitt. The extreme eagerness displayed by Canning for the restoration of the heaven-born minister, as well as the independent tone he assumed in his remonstrances with his chief, may be learned from *Lord Malmesbury's Memoirs*. The best of his satirical effusions against Addington appeared in a newspaper called *The Oracle*, which is alluded to by Lord Grenville in a letter of June 14, 1803, as showing a disposition to go go over to the Government side. "You will see that *The Oracle* *Philippizes*, and probably for the same reasons that produced that effect of old." They are reprinted in the *Spirit of the Public Journals* for 1803 and 1804. As this has become a scarce and not easily accessible compilation, we shall extract a portion of the less known squibs which the concurrent voices of contemporaries assign to Canning. To him undoubtedly belongs the song :

"How blest, how firm the statesman stands,
(Him no low intrigue shall move,)
Circled by faithful kindred bands,
And propped by fond fraternal love !

"When his speeches hobble vilely,
What 'Hear him!' burst from Brother Hiley;
When his faltering periods lag,
Hark to the cheers of Brother Brag !"

His delicate play of fancy may be traced in the concluding lines of "Good Intentions:"

" 'Twere best, no doubt, the truth to tell,
But still, good soul, he means so well !'
Others, with necromantic skill,
May bend men's passions to their will,

Raise with dark spells the tardy loan,
To shake the vaunting *Consul's* throne;
In thee no magic arts surprise,
No tricks to cheat our wondering eyes;
On thee shall no suspicion fall,
Of slight of hand, or cup and ball;
E'en foes must own thy spotless fame,
Unbranded with a conjurer's name !

Ne'er shall thy virtuous thoughts conspire
To wrap majestic *Thames* in fire !

And if that black and nitrous grain,
Which strews the fields with thousands slain,
Slept undiscovered yet in earth—
Thou ne'er hadst caused the monstrous birth,
Nor aided (such thy pure intention)
That diabolical invention !

Hail then—on whom our State is leaning !
O Minister of mildest meaning !
Blest with such virtues to talk big on,
With such a head, (to hang a wig on.)
Head of wisdom—soul of candor—
Happy Britain's guardian gander,
To rescue from th' invading *Gaul*
Her 'commerce, credit, capital !'
While Rome's great goose could save alone
One Capitol—of senseless stone."

Was it possible to say more courteously of a statesman that he was no conjuror, and that he would never have set the Thames on fire, nor have discovered the invention of gunpowder, although quite competent to rival the feathered saviors of the Capitol ? The changes are rung on the Doctor with inexhaustible versatility, as in the happy parody of Douglas :

"My name's the Doctor : on the Berkshire hills
My father purged his patients—a wise man ;
Whose constant care was to increase his store
And keep his eldest son—myself—at home.
But I had heard of politics, and longed
To sit within the Commons' House, and get
A place : and luck gave what my sire denied."

"Ridicule," writes Lord Chesterfield, "though not founded upon truth, will stick for some time, and if thrown by a skillful hand, perhaps forever." Nicknames are serious matters, even in a grave country like England. In the correspondence of the time, Addington is almost invariably mentioned as the Doctor ; and, as we stated in a recent Number, Lord Holland quotes the old Lord Liverpool as having "justly observed that Addington was laughed out of power and place by the *beau monde*." Prior to the Reform Bill, what old Lord Liverpool must have meant by the *beau monde*, namely, the fine gentlemen (including the leading wits and orators) who congregated at the clubs in St. James's Street, exercised a degree

of influence which may sound strange to politicians of our day. Yet a far more powerful and better sustained fire than was brought to bear on Addington, had been directed against Pitt by the wits of the *Rolliad*, without any perceptible effect; and the inherent weakness of Addington's government from its formation, sufficiently explains its fate, quite independently of the laughter it provoked.

When (May 7, 1804) Pitt had made up his mind to resume the Premiership, Canning was one of the first to whom he communicated his intention, and had his choice of two offices, the Treasurership of the Navy and the Secretaryship of War. He chose the former, and was thereby led to take a prominent part in defending Lord Melville. Whitbread, in moving the impeachment, happened to let fall some expressions which struck Canning in so ludicrous a light, that before the oration was well ended he had completed a report in rhyme.

"I'm like Archimedes for science and skill;
I'm like a young prince going straight up a hill;
I'm like (with respect to the fair be it said)—
I'm like a young lady just bringing to bed.
If you ask why the first of July I remember
More than April, or May, or June, or November;

"Twas on that day, my lords, with truth I assure
ye,

My sainted progenitor set up his brewery.

On that day, in the morn, he began brewing
beer;

On that day, too, commenced his connubial career;

On that day he renewed and he issued his bills;

On that day he cleared out all the cash from his till.

On that day too he died, having finished his summing,

And the angels all cried: Here's old Whitbread
a-coming.

So that day still I hail with a smile and a sigh
For his beer with an ð, and his bier with an i.
And still on that day in the hottest of weather,
The whole Whitbread family dine all together.
So long as the beams of this house shall support
The roof which o'ershades this respectable court—

As long as the light shall pour into these windows,

Where Hastings was tried for oppressing the
Hindoos,

My name shall shine bright, as my ancestor's
shines—

Mine recorded in journals, his blazoned on signs."

Useful as Canning's talent for satire had proved to his party, it tended rather

to retard than accelerate his advancement to high office. Thus Lord Malmesbury (March 14, 1807) writes: "He is unquestionably very clever, very essential to Government, but he is *hardly yet a statesman*, and his dangerous habit of *quizzing* (which he can not restrain) would be most unpopular in any department which required pliancy, tact, or conciliatory behavior." In the very next month after this was written, however, Canning was made Secretary for Foreign Affairs in the administration formed by the Duke of Portland. Henceforth his contributions to the press became less frequent, and at length closed altogether, except when he was tempted by some especially congenial topic. He was one of the three or four persons who were first consulted about the institution of the *Quarterly Review*, suggested by Sir Walter Scott for the purpose of counteracting what he was pleased to call the wide-spread and dangerous influence of this Journal. In a letter to Mr. George Ellis, dated Nov. 2, 1808, he says: "Canning is, I have good reason to know, very anxious about the plan." On the 18th he writes to the same correspondent: "As our start is of such immense consequence, don't you think Mr. Canning, though unquestionably our Atlas, might for a day find a Hercules on whom to devolve the burden of the globe, while he writes us a review? I know what an audacious request this is; but suppose he should, as great statesmen sometimes do, take a political fit of the gout, and absent himself from a large ministerial dinner, which might give it him in good earnest—dine at three on a chicken and pint of wine, and lay the foundation of at least one good article. Let us but once get afloat, and our labor is not worth talking of; but, till then, all hands must work hard."*

The request was not made, or not granted, or no Hercules could be found to bear the burden of the globe whilst Atlas was composing an article for the *Quarterly*. But we learn from the same authority, that two articles on Sir John Sinclair and his Bullion Treatises, which appeared in the numbers for November, 1810, and February, 1811, were the joint production of Canning and Frere; and it was understood at the time that the popu-

* Lockhart's *Life of Sir Walter Scott*, vol. ii. p. 214.

larity of an article headed "Mr. Brougham—Education Committee," which appeared in the same Review for December, 1818, was mainly owing to the additions and finishing touches of the accomplished statesman. This article was professedly by Dr. Monck, afterwards Bishop of Gloucester, who merely supplied the coarse cloth on which the gold lace and spangles were to be sewn—the pudding for the reception of the plums—and made himself ridiculous by subsequently taking credit for the wit.*

The articles on Sir John Sinclair probably owed much of their success to the popular impression of that highly respectable and rather laughable personage. They are fair specimens of the art of "abating and dissolving pompous gentlemen." But the humor is spun out to tediousness; and the consequence is, that not a single passage, condensed and pointed enough for quotation, could be selected from either of them. The same remark applies to the lighter passages interspersed amongst the weighty and solid lucubrations of Dr. Monck. That, for example, in which the proposed Commission is quizzed in Canning's peculiar manner, occupies more than a page, but we can only find room for the concluding sentences:

"It is even affirmed, we know not how truly, that with the help of the gentlemen of the British Museum, the learned institutor had actually constructed the statutes of his foundation in that language of which his late researches have made him so absolute a master; and the oath to be taken by each candidate for a fellowship, and by each fellow on his admission, ran in something like the following terms: the first, *Se nunquam duo vel plura Brevia intra Biennium accepisse*; the second, of a more awful import, *Se nullas prorsus habere possessiones præterquam unam Purpuream Baggam flacciscentem omnino inanitatis causâ*."

The last of Canning's political squibs that has fallen in our way, is the following:

* In his third letter to Archdeacon Singleton, Sydney Smith says: "I was afraid the Bishop would attribute my promotion to the *Edinburgh Review*; but upon the subject of promotion by reviews he preserves an impenetrable silence. If my excellent patron, Earl Grey, had any reasons of this kind, he may at least be sure that the reviews commonly attributed to me were really written by me. I should have considered myself as the lowest of created beings to have disguised myself in another man's wit and sense, and to have received a reward to which I was not entitled." The late Mr. Croker laid claim to the credit of having aided Canning in polishing and pointing this article.

LETTER FROM A CAMBRIDGE TUTOR TO HIS FORMER PUPIL, BECOME A MEMBER OF PARLIAMENT: WRITTEN IN THE YEAR (1824) IN WHICH THE RIGHT HONORABLE FREDERICK ROBINSON, CHANCELLOR OF THE EXCHEQUER, REPEALED HALF THE DUTY ON SEABORNE COALS IMPORTED INTO THE PORT OF LONDON.

"Yes! fallen on times of wickedness and woe,
We have a Popish ministry, you know!
Prepared to light, I humbly do conceive,
New fires in Smithfield, with Dick Martin's leave.

Canning for this with Robinson conspires—
The victim, this provides—and that, the fires.
Already they, with purpose ill-concealed,
The tax on coals have partially repealed;
While Huskisson, with computation keen,
Can tell how many pecks will burn a dean.
Yes! deans shall burn! and at the funeral pyre,
With eyes averted from the unhallowed fire—
Irreverent posture!—Harrowby shall stand,
And hold his coat-flaps up, with either hand."

It may be doubted whether any of the very clever squibs collected in *The New Whig Guide*, are by Canning, but he has been traditionally credited with the parody of Moore's beautiful song, "Believe me, if all those endearing young charms;" the gentleman addressed being a distinguished commoner, afterwards ennobled, who was far from meriting the character thereby fastened on him:

"Believe me, if all those ridiculous airs,
Which you practice so pretty to-day,
Should vanish by age, and your well-twisted hairs,
Like my own, be both scanty and gray:

"Thou would'st still be a goose, as a goose thou hast been,
Though a fop and a fribble no more,
And the world that has laughed at the fool of eighteen,
Would laugh at the fool of threescore.

"'Tis not whilst you wear that short coat of light brown,
Tight breeches, and neckcloth so full,
That the absolute void of a mind can be shown,
Which time will but render more dull.

"Oh! the fool that is truly so, never forgets,
But as truly fools on to the close,
As P * * * leaves the debate when he sits,
Just as dark as it was when he rose."

Most of the families with whom Canning lived on terms of cordial intimacy have retained one or more specimens of his occasional verses. These playful lines were addressed to Mrs. Leigh on her wedding-day, *apropos* of a present from her to him of a piece of stuff to be made into a pair of shooting-breeches:

"While all to this auspicious day,
Well pleased their grateful homage pay,
And sweetly amile, and softly say
A thousand pretty speeches;

"My muse shall touch her tuneful strings,
Nor scorn the lay her duty brings,
Though humble be the theme she sings—
A pair of shooting-breeches.

"Soon shall the tailor's subtle art
Have fashioned them in every part—
Have made them tight and spruce and smart,
With twenty thousand stitches.

"Mark then the moral of my song—
Oh! may your loves but prove as strong,
And wear as well, and last as long,
As these my shooting-breeches.

"And when to ease this load of life,
Of private care and public strife,
My lot shall give to me a wife,
I ask not rank or riches.

"Temper, like thine, alone I pray,
Temper, like thine, serenely gay,
Inclined, like thee, to give away,
Not wear herself—the breeches!"

The best of his verses of the serious and pathetic kind are the epitaph to his son, who died in 1820:

"Though short thy span, God's unimpeached decrees,
Which made that shortened span one long disease,
Yet, merciful in chastening, gave thee scope
For mild, redeeming virtues, faith and hope;
Meek resignation; pious charity:
And, since this world was not the world for thee,
Far from thy path removed, with partial care,
Strife, glory, gain, and pleasure's flowery snare,
Bade earth's temptations pass thee harmless by,
And fixed on heaven thine unreverted eye!

"Oh! marked from birth, and nurtured for the skies!
In youth, with more than learning's wisdom, wise!

As sainted martyrs, patient to endure!
Simple as unweaned infancy, and pure!
Pure from all stain, (save that of human clay,
Which Christ's atoning blood hath washed away!)
By mortal sufferings now no more oppressed,
Mount, sinless spirit, to thy destined rest!
While I, reversed our nature's kindlier doom,
Pour forth a father's sorrows on thy tomb."

It would be both instructive and entertaining to trace the influence of Canning's literary taste and talents, with their peculiar cultivation and application, upon his oratory. To his confirmed habit of quizzing might be owing that quality of his speeches which led to their being occasionally mentioned as mere effusions of questionable facetiousness; whilst to the glowing fancy which gave birth to the graceful poetry reproduced in these pages, might be traced those ornate specimens of his eloquence which have caused him to be by many inconsiderately set down as a rhetorician. We refer, for humor, to the speech on the Indemnity Bill, in which occurs the unlucky allusion to the "revered and ruptured Ogden;" for imagination and beauty of expression, to the description of the ships in Plymouth harbor; to the comparison of Pitt's mistaken worshipers to savages who only adore the sun when under an eclipse; and to the fine illustration of the old continental system recovering after the revolutionary deluge, as "the spires and turrets of ancient establishments beginning to reappear above the subsiding waves." Yet, surely even the chastest and severest school must admit that fancy and humor add point and strength to knowledge and truth. Nor, looking to modern examples, will it be denied, that literary acquirements and accomplishments may form the Corinthian capital of a parliamentary reputation, and indefinitely exalt the vocation and character of statesmanship.

From Bentley's Miscellany.

ASTRONOMIC FANCIES.

BY W. CHARLES KENT.

COMETS.

ALL comets slung through space abroad
Are weaving Heaven's eternal praise,
While threading all the starry maze—
The shuttles of the loom of God.

PLANETS.

The lustrous velvet of a ripening plum
Is but the sign of Earth's minutest life;
So may heaven's orbs, with vital beauty rife,
Seen by God's eye, like blooming fruit become.

CONSTELLATIONS.

As on revolving discs responsive sand
Wreathes into lovely shapes—a mystic dance!
So o'er the circling plains of heaven may
glance
God's golden star-dust strown with affluent
hand.

SATELLITES.

In antique feasts 'mid wine-cups trailed with
bloom
The grimly skull gleamed o'er the Sybarite
board;
Lo! like a death's-head, where the Moon
(dread Lord!)
Smiles o'er Earth's flowery banquet-hall her
doom.

SUNS.

As God, an atom once blind man adored
Yon solar symbol of creative might;
Systems and suns struck out, mere showers
of light,
Sparks from the glowing anvil of the Lord.

SYSTEMS.

Heaven's golden spheres Earth's purpling grapes
recall,
So mellowing hang till time their lot fulfill—
When shaken by the fiat of his will
The ripened clusters of God's vintage fall.

PLANETARY ELLIPSES.

Concentric circles whirled together round
Another, grander, central orb of light:

May not those rings be lengthened by their
flight,
And thus the key of the ellipse be found?*

THE MUSIC OF THE SPHERES.

Inaudible to aught save heavenly ears
As round the honeyed hive the bee-swarm
burns,
So from yon golden maze that wheels and
turns
Resounds through space the Music of the
Spheres.

* This little fanciful hypothesis of mine I would respectfully submit to the consideration of our astronomers. It may be briefly resolved into the query: Whether M. Mädler's discovery of a central sun round which our whole solar system is revolving with scarcely conceivable rapidity, may afford an instant explanation of the planetary ellipse?

Every one acquainted with the mere alphabet of astronomy, is of course perfectly aware that the ever memorable problem propounded by Sir Isaac Newton in relation to the planetary orbits, expressed itself literally in these *ipsissima verba*—"To determine the nature of the curve which a body would describe in its revolution about a fixed center to which it was attracted by a force proportional to the mass of the attracting body, and decreasing with the distance according to the law of gravitation;" Copernicus having previously surmised that the planetary orbits were circular, while Kepler, on the contrary, had suggested that they were elliptical. Every one of us, moreover, delights to recall to mind Newton's almost rapturous amazement when he found that the answer to that problem was the general algebraic expression embracing all the conic sections—the planets revolving in ellipses, the satellites of Jupiter in circles, the comets in orbits both parabolic and hyperbolic.

Accepting with the reverence due to it every iota of that sublime demonstration, and bearing in recollection, with all homage for Sir Isaac, every thing he has written thereupon about the centrifugal and centripetal forces, may we not now ask ourselves anew—now that we are studying the phenomenon of the planetary ellipse by the light of that newly-discovered grander central sun of suns, opened to view so very recently by the researches of M. Mädler, of Dorpat—whether there may not lie near at hand, already within our grasp, a much less recondite and far more easily comprehensible solution?

Granting, as astronomical science does grant nowadays, that the whole solar system, sun, comets,

planets, satellites, are moving, whirling through space at the rate, it is computed, of 150,000,000 miles in a year—wheeling onwards in the direction of a particular point in the heavens, namely: the star π in Hercules, speeding on in a circuit of such gigantic dimensions about that mighty central orb (Acyone, the principal star in the Pleiades) that it requires for the completion of its stupendous orbit the lapse of no less astounding a cycle of years, than 18,200,000—is it not readily conceivable, that in the whirling of those concentric rings, the planetary orbits, along the path of that marvelous circumference, the circles would by the very swiftness of their flight be lengthened—that from being circular they

become elliptical? Precisely as the revolution of the earth upon its axis causes it to be flattened at the poles while it increases its diameter at the equator, rendering its form no longer a perfect sphere, but rather what is geometrically designated an oblate spheroid. If what may be called with the strictest accuracy the eternal law of celestial dynamics manifests itself thus distinctly by its operation upon solid inert matter, how much more comprehensible that it should be as distinctly evidenced through a more elastic medium—not upon an orb, but on an orbit!

—W. C. K.

Astronomers may pronounce whether for these humble and valueless initials there may be substituted three others, grandly symbolical—Q. E. D.

From the Westminster Review.

OCEAN STEAM NAVIGATION, AND THE OCEAN POST.

REGARDING the progress, prosperity, and power of civilized nations as dependent on the magical agencies of steam, and pronouncing foreign commerce to be a necessity of the large and redundant agricultural production of the United States, Dr. Rainey invites the Federal Government to provide the people with rapid steam-mails and liberal postal facilities. In reviewing the present position of steam navigation,* he shows the indispensableness of fast ocean communication, explains the commercial capabilities, and calculates the cost of steam, and proves that individual enterprise can not furnish a fast mail and passenger marine. Denouncing the slavish dependence of America on Great Britain for rapid ocean transport, Dr. Rainey urges the Presidential Government to adopt the same wise and comprehensive steam system as that already established by the British Government. Americans, while sympathizing in the triumphs of their Transatlantic brethren, must, he contends, blush at their own dereliction in this enriching and civilizing service. The United States need such a service, not to control the world, but to control its commerce. The trade with Brazil, and other parts of South-America, demands a direct steam post. To carry a letter four thousand miles, a distance of eight thousand miles must be traversed. Alike for foreign

diplomacy, consular service, correspondence with Europe, and purposes of naval direction, America requires an independent, effective, and systematic transmarine service. At present, while Great Britain has 1670 ocean steamers with 666,330 aggregate tons, the United States have but 57, with 94,795 aggregate tons. In a separate section, the mail steam system, inaugurated by Great Britain, is sketched historically, and its operation succinctly indicated, from the first contract, in 1833, with the Mona Isle Steam Company, to that recently completed by the Peninsular and Oriental Company. The ocean mail steamers of Great Britain run 2,532,231 miles per year, at a cost to the Admiralty of £1,062,797. Those of the United States run 735,732 miles per year, at a total charge on the post-office department of \$1,329,733. In the progress of his work, Dr. Rainey gives us much useful information of a scientific and technical kind; the natural laws of resistance, power and speed, are discussed, authorities cited, and tables supplied. The supplementary papers furnish valuable tabular statements on the ocean mail service of America and Great Britain, of the French and English navies,* the ocean steam lines of the world, and contain numerous extracts from the Senate reports and other documents.

* *Ocean Steam Navigation, and the Ocean Post.* By Thomas Rainey. Second Edition. New-York: Appleton & Co. London: Trübner & Co. 1858.

* July, 1856. Great Britain.—Total of steam and sailing vessels, 527; 13,880 guns. France.—Total of steam and sailing vessels, 537; 14,077 guns. United States.—Total of steam and sailing vessels, 73.

BIOGRAPHICAL SKETCH OF DAVID GARRICK AND HIS WIFE.

To add variety and interest to the artistic embellishments of the *ECLECTIC*, we present to our readers, this month, a pleasant domestic scene in the life of Garrick, so renowned for his histrionic displays. Both Garrick and his wife are historic characters, which imparts additional interest to the print, which seems to tell its own pleasant story of playful affection in a retired scene of connubial life. We fancy Garrick as here represented, is musing in deep thought, and mentally arranging "his favorite scheme of the jubilee in honor of Shakspeare, at Stratford-upon-Avon;" and that some of his brilliant thoughts have thrilled down to the end of his fingers, which are striving for utterance in expressive gesture, at the moment when his loving and beautiful wife trips silently along in playful mood to interrupt his thoughts in the manner so graphically presented by Mr. Sartain, in the print. We only offer a brief outline biographical sketch, containing a few historic facts in addition to those to be found on pages 137-8 of our last volume, and from a different source. David Garrick was descended from a French Protestant family of the name of Garrie, or Garrique, and was born on the 20th of February, 1716, at the Angel Inn, Hereford. His father was Captain Peter Garrick, of the Old Buffs, then recruiting in that city, and his mother, whose maiden name was Arabella Clough, was the daughter of one of the vicars of Lichfield Cathedral. At ten years of age he was placed under the care of Mr. Hunter, master of the grammar-school of Lichfield. Afterwards he went to Lisbon on a visit to his uncle, a wine-merchant there, and by his agreeable manners became a great favorite not only with the English residents, but amongst the young Portuguese nobility. In the following year he returned to school at Lichfield, and during occasional visits to London encouraged his growing passion for theatricals. In 1735 he became the pupil of Dr. (then Mr.) Samuel Johnson, with whom, on the 2d of March, 1736, he set out for the metropolis, and on the 9th of the same month entered himself in the

Society of Lincoln's Inn. In 1737 he commenced a course of studies under Mr. Colson, the mathematician, at Rochester.

Shortly afterwards, on the death of his father, he commenced business as a wine-merchant, in partnership with his elder brother, Peter Garrick. This partnership was however soon dissolved, and in 1741 David Garrick finally resolved upon the profession of the stage, and made his first appearance at Ipswich under the name of Lyddal, and in part of Aboan, in the tragedy of *Oroonoko*. In the autumn he returned to London with the manager of the Ipswich company, who was also proprietor of the theater in Goodman's Fields; and on the boards of that establishment Mr. Garrick made his first appearance as Richard III., October 19th, 1741. The fame of the young actor, then only in his twenty-sixth year, spread in a few weeks throughout the metropolis; and from the time of his first benefit, December 2d, on which occasion he performed *Lothario*, in *The Fair Penitent*, persons of every condition flocked from all parts of the town to see him, and entirely deserted the theaters at the West-End. In 1745 he became joint manager, with Mr. Sheridan, of the Theater Royal in Dublin. In 1746 he returned to England. On the 22d of June, 1749, Mr. Garrick married Eva-Maria Violette, the daughter of a respectable citizen of Vienna. Her real family name was Veigel, which in the Viennese patois signifies Violet, and she assumed the name of Violette by command of the Empress Maria Theresa.

On the 7th of September, 1769, Garrick put into execution his favorite scheme of the Jubilee in honor of Shakspeare, at Stratford-upon-Avon, and produced a pageant on the subject at Drury Lane in the following October. On the 10th of June, 1776, having managed Drury Lane Theater for twenty-nine years (with the exception of two passed abroad, 1763 and 1764,) Garrick took his leave of the stage in the character of Don Felix, in the *Wonder*, the performances being for the benefit of the fund for decayed actors. In

1777 Mr. Garrick was honored by the command of their majesties King George III. and Queen Charlotte, to read a play at Buckingham House. He selected his own farce of *Lethe*, introducing for the occasion the character of an ungrateful Jew; but having been so long accustomed to the thunders of applause in a theater, the refined approbation of the royal party threw, to use his own expression, "a wet blanket" over him. In the same year he was put into the Commission of the Peace.

At Christmas, 1778, while on a visit to Lord Spencer, at Althorpe, he had a severe fit, from which he only recovered sufficiently to enable him to return to town, and expired January 20th, 1779, at his own house in the Adelphi, having nearly completed his 63d year. He was

buried with great pomp in Westminster Abbey on the 1st of February.

As an actor, Mr. Garrick's merits may be considered as summed up in the forcible words of Pope to Lord Orrery on witnessing the performance of Richard: "That young man never had his equal as an actor, and will never have a rival." As yet the prophecy is unshaken. Garrick was an excellent husband, a kind master, and a matchless companion.

Mrs. Garrick survived her husband forty-three years, and expired suddenly in her chair after a short indisposition, at her house in the Adelphi, on the 16th of October, 1822, in the 98th year of her age, having retained her faculties to the last.

Garrick's private correspondence, with a new biographical memoir, was published in 2 volumes quarto, London, 1831.

BIOGRAPHICAL SKETCH OF REV. CHARLES KINGSLEY.

As we have several times published reviews of the works of this talented man, and have more to appear in our columns in future, we deem it courteous to show his face to our numerous readers who have become our patrons since its former appearance. We reproduce it in this number that they may read his productions with the more interest.

Rev. Charles Kingsley, rector of Eversley, Hants, and canon of Middleham, was born at Holne Vicarage, Devonshire, on the 12th of June, 1819. His father, the Rev. Charles Kingsley, senior, is at present rector of Chelsea. The Kingsleys are an old Cheshire family, tracing their descent from before the Conquest. They served with distinction on the parliamentary side during the civil wars, and suffered in consequence; and a younger branch of the family emigrated to America, and has left descendants there. After being educated at home till the age of fourteen, Mr. Kingsley became a pupil of the Rev. Derwent Coleridge, the son of the poet; from under whose care he removed to Magdalen College, Cambridge. Here he held a scholarship, and obtained distinc-

tion both in classics and mathematics; and took his B.A. degree, but did not proceed to that of M.A. For a time his intended profession was the law, but he ultimately decided for the church. He was appointed curate of Eversley, a moorland parish in Hampshire; and the rectory of this parish falling vacant in the second year of his curacy, (1844,) he was appointed to the living by the patron. In the same year he married the daughter of Pascoe Grenfell, Esq., many years M.P. for Truro and Great Marlow; another of whose daughters has since become the wife of another eminent man of letters of the present day, the historian and essayist, J. A. Froude. Mr. Kingsley, as a clergyman, belongs neither to the "High" Church nor to the "Low" Church, but to what has been called the "Broad" Church party; that is, his name is associated in theological and ecclesiastical matters with those of Mr. Maurice, Archdeacon Hare, and others of the same order of thought.

Meanwhile, full of the facts and of the feelings of the movement, Mr. Kingsley had published his *Alton Locke: Tailor*

and *Poet*, a novel of which a tailor was the hero, and which, from the earnestness with which it treated social and political questions, (the earnestness it was said of a "Chartist clergyman,") as well as from its power as a work of imagination, at once made the author's name known over the country. *Alton Locke* was followed in 1851 by a second fiction, philosophical rather than political, entitled *Yeast: a Problem*, reprinted from *Frazer's Magazine*; this in 1853 by a powerful historical and philosophical romance, also collected in two volumes from *Frazer's Magazine*, and entitled *Hypatia, or New Foes with an Old Face*; and this again in 1855 by *Westward Ho! or the Voyages and Adventures of Sir A. Leigh, Knt., in the Reign of Queen Elizabeth*, a three-volume novel. In all these novels, while there is a singular blending of imaginative and descriptive power with philosophical thought, and also a remarkable liberality of sentiment, there is a uniform presence

of the argument for the intellectual and social omnipotence of Christianity. Mr. Kingsley's last publications are—*Glaucus, or the Wonders of the Shore*, 1855, (an expansion of an article on the study of natural history which appeared originally in the *North-British Review*;) and *The Heroes, or Greek Fairy Tales*, (an adaptation of some of the Greek myths for Children,) 1856. Mr. Kingsley has contributed largely to *Frazer's Magazine* and to the *North-British Review*, and more recently to the eighth edition of the *Encyclopædia Britannica*. He has also delivered many lectures, some of which, in addition to those mentioned above, have been published separately or as parts of collections of lectures. Altogether, as he is one of the most popular writers of the day, (as is proved by the sale of his writings,) so he is certainly one of the most independent and influential; and being still young, much more is to be hoped from his farther life.

HOPE THE ANGEL OF LIFE.

BY F. L. JAQUEROD.

"THE miserable have no other medicine
But only hope." SHAKESPEARE.

"Come and cradle my sorrows into rest." BOWRING.

"Angel of life! thy fluttering wings explore
Earth's loneliest bounds, and Ocean's wildest shore." T. CAMPBELL.

I hail thee, fairest child of heaven!
Bright Hope, with angel-charms arrayed;
Kindly to sorrowing mortals given,
Their path to light, their toil to aid!

When on thy breast we find repose,
How lightly glides the favoring hour!
If Pleasure may be deemed a rose,
Hope is the bud of that sweet flower.

Thy anchor the frail bark sustains,
Of him who battles with the storm;
Where blighted friendship fate arraigns,
Thy breath the stricken heart doth warm.

Nay, unrepelled by bolt or chain,
Thou even seek'st the dungeon drear;
If Hades mourns its cureless pain,
'Tis that thou hast not entered there.

I see thy seraph-form repel
The plaint, the sigh, the vain despair,
O'er the dark future throw a spell,
And show thy rainbow mildly fair.

When wasting griefs o'erweigh the soul,
And chimes the hour that sets it free,
Thou point'st afar th' Elysian goal,
And Death is welcome—blest by thee.

SMILES THE SUNBEAMS OF THE SOUL.

BY ADA TREVANION.

SMILES can melt the hearts of foemen,
Smiles can change their hate to love;
Smiles on every brow are written
'Mongst the white-robed throngs above.

In our world of care and sorrow,
Where regret and pain are rife,
Tender smiles are the soul's sunbeams;
Without them, how dark were life!

Yet some wear a kind smile seldom
To those who joy or grieve;
Others, whose cold hearts are callous,
But smile where they would deceive.

As an angel's radiant presence
Lightens dull and common ground;
So the smiles of soul and feeling
Shed a heaven-born halo round.

L I T E R A R Y M I S C E L L A N I E S .

A DISTINGUISHED archaeologist among the Jesuits, now resident here, Raffaele Garrucci, announces as forthcoming from the Roman press a work entitled "Remains of Glass ornamented with Figures, in the Cemeteries of Rome, Illustrated." (*Vitri ornati di Figure*, etc.), his original intention having been, as he informs us in the prospectus, to supply amplification of a work published in 1716 by F. Buonarruoti, with explanations, and engravings of seventy-two glass fragments found among the Christian antiquities of Rome.

THE COMET.—The long-expected comet of Charles V. is beginning to enter an appearance at last. It has been detected in a faint and dim, but this time unmistakable, presence below the horizon, at the Paris Observatory. It is but fair to add that, so early as the 2d. of June, Professor Donati, at Florence, had cried "Eureka," and indicated the point at which it was about to emerge.

A BERLIN letter says that the clerical authorities of that city have been informed of the period at which to offer up prayers for the happy delivery of the Princess Frederick William. The Prince and Princess live in perfect seclusion, at the Prince of Prussia's pretty summer residence, Babelsburg, near Potsdam.

THE PROTESTANTS OF HUNGARY.—The Protestants of Hungary are about to make another attempt to obtain from the Austrian government the regularization of their spiritual affairs. A deputation is about to proceed to the capital of the Empire, but it will probably have no greater success than the other, for the address which they were to deliver to the Emperor, and which was printed in order to be delivered to the pastors of the different Protestant churches, has been seized by the police. This address, which was couched in terms full of devotedness to the Emperor, was intended only for private circulation.

THE QUEEN'S VISIT TO GERMANY.—The French papers publish a letter from Berlin, stating that it is believed, in court circles, that Queen Victoria will arrive at Babelsburg, the residence of the Prince and Princess Frederick William, on the 12th of August, and remain about a fortnight. Owing to the absence of the King, there will be no fêtes nor public reception.

THE fashion of crinoline has received a severe check in Vienna, where the actresses of the Carl Theater have been prohibited from wearing it. This measure was rendered necessary by the fact that an actress, who in the character of an orphan, was to have fainted away and fallen to the ground, found it impossible to realize the latter idea with any thing like nature, from being so strongly cased in her steel-bound framework.

THE Ottoman Government, besides the punishment it is to inflict on the authors of the massacre of Jeddah, offers, it is said, a sum of 150,000*l.* to the families of the English and French Consuls who have been assassinated.

AN old inhabitant of Cherbourg, who was captain of the vessel in which the Emperor Napoleon I. made his first cruise, when Sub-lieutenant of Artillery, has preserved the log-book, which he intends to present to his Majesty at his approaching visit. The name of this officer is Langooin, formerly sub-inspector of the works in the port.

A NEW East-India Company is in course of formation for trading, the formation of works for irrigation, the holding of lands, the cultivation of tea, etc.; in fact, to do all which the East-India Company was originally constituted to do, but which it ceased to carry out on assuming the functions of political authority.

REVELATIONS OF THE MICROSCOPE.—One of the most beautiful works which have lately been published, is a series of photographs from objects magnified in the microscope. The last number is devoted to the bee; whose sting excels the lancet in the elaboration, care, and finish of its manufacture; whose hairy tongue is like a living hair glove, most elaborately designed to collect the materials for honey; and whose powerful wing is aided by a mechanical contrivance of the most beautiful ingenuity. Every one knows, or may know, that the bee has two wings on each side. At the edge of one wing runs a stiff nerve, which in the microscope is a bar. Along this bar at frequent intervals are ranged semicircular barbed hooks, like the half of a ring, so placed that the edge of the other wing lies within the semicircles which clasp it, and at the same time permit it to play freely, as the rings of a window-curtain move along the long brass bar. By this contrivance the two wings become united as one, yet freely play upon different hinges. "Design" is a human word, implying in its very nature human imperfection, yet it is the only term which we can apply to the purpose which runs through formations like that of a bee's wing. It is the microscope with its minute search that enables us to discover this design in every thing that we can dissect—in all living creatures and the parts thereof, to millions upon millions, always tending to life and happiness. Who can examine these illustrations of the power of the Creator and of the law which rules over his work, and not feel an impulse to sing in his soul, "Gloria in excelsis"?—*Spectator*.

ANTIQUITY OF PLACING THE BIBLE IN CHURCHES.

—In the register of wills at York, it is recorded that Thomas de Farnyshaw, Chancellor of the Church at York, bequeathed at his death, in 1378, a Bible and Concordance to the Church of St. Nicholas, at Newcastle, "there to be chained for a common use for the use of his soul." Ceolfriith, Abbot of Wearmouth, having caused three copies to be made of the entire Bible, sent one as a present to the Pope, and placed the others in two different churches, "to the end that all who desired to read any chapter in either Testament might be able to find at once what they desired." And King Edgar transmitted to every county in his kingdom, copies of the Holy Scriptures for the instruction of the people.

THE POISON OF THE COBRA DI CAPELLO.—In dissecting a rat which had been killed by the side of a cobra, anxious to see if the skin itself was affected, I scraped away parts of it with my fingernail. Finding nothing but the punctures, I threw the rat away, and put the knife and skin in my pocket, and started to go away. I had not walked a hundred yards, before all of a sudden I felt just as if some body had come behind me and struck me a severe blow on the head and neck, and at the same time I experienced a most acute pain and sense of oppression at the chest, as if hot iron had been run in and a hundred-weight had been put on the top of it. I knew instantly, from what I had read, that I was poisoned; I said as much to my friend, a most intelligent gentleman, who happened to be with me, and told him if I felt to give me brandy and eau-de-luce, words which he kept repeating in case he might forget them. At the same time I enjoined him to keep me going, and not on any account to allow me lie down. I then forgot every thing for several minutes, and my friend tells me I rolled about as if very faint and weak. He

also informs me that the first thing I did was to fall against him, asking if I looked seedy. He answered: "No, you look very well." I don't think he thought so, for his own face was as white as a ghost; I recollect this much. He tells me my face was a greenish yellow color. After walking or rather staggering along for some minutes, I gradually recovered my senses, and steered for the nearest chemist's shop. Rushing in, I asked for eau-de-luce. Of course he had none, but my eye caught the words, "Spirit ammon. co.," or hartshorn, on a bottle. I reached it down myself, and pouring a large quantity into a tumbler with a little water, both of which articles I found on a soda-water stand in the shop, drank it off, thought it burnt my mouth and lips very much. Instantly I felt relief from the pain at the chest and head. The chemist stood aghast, and on my telling him what was the matter, recommended a warm bath. If I had then followed his advice, these words would never have been placed on record. After a second draught at the hartshorn bottle, I proceeded on my way, feeling very stupid and confused. On arriving at my friend's residence close by, he kindly procured me a bottle of brandy, of which I drank four large wine-glasses one after the other, but did not feel the least tipsy after the operation. Feeling nearly well, I started on my way home, and then, for the first time perceived a most acute pain under the nail of the left thumb; this pain also ran up the arm. I set to work to suck the wound, and then found out how the poison had got into the system. About an hour before I examined the dead rat, I had been cleaning the nail with a penknife, and had slightly separated the nail from the skin beneath. Into this little crack the poison had got when I was scraping the rat's skin to examine the wound. How virulent, therefore, must the poison of the cobra be! It already had been circulated in the body of the rat, from which I had imbibed it second-hand.—*Buckland's Curiosities of Natural History*.

ICELAND FROM THE SEA.—The north-west division of Iceland consists of one huge peninsula, spread out upon the sea like a human hand, the fingers just reaching over the Arctic circle; while up between them run the gloomy fiords, sometimes to the length of twenty, thirty, and even forty miles. Any thing more grand and mysterious than the appearance of their solemn portals, as we passed across from bluff to bluff, it is impossible to conceive.—*Letters from High Latitudes*.

JENNY LIND IN LONDON.—*The London Critic* says: Jenny Lind has come to live amongst us. It was announced that she had resolved a long time ago, after she had given up her projected journey to Russia, to leave her present residence, Dresden, and settle in England. This intention she has now carried out. After all her furniture in Dresden had been disposed of, no inconsiderable number of packages, with articles of value, etc., were forwarded last week, *via* Hamburg, to England, where Jenny Lind will repose in retirement on her laurels at a villa near London. Since the appearance of that paragraph, the great *cantatrice* has arrived with her husband and two children. The whole family have taken possession of a neat villa, called Roehampton Lodge, situated near to the south side of Barnes Common, and about a mile from Putney. The house is in a retired position, and in the immediate vicinity of Putney Common and the picturesque village of Roehampton.

THE SOLAR ECLIPSE.—Lieut. Gilliss, U.S.N., sailed in the steamer *Moses Taylor*, for the Isthmus, and thence proceeds to Payta, in Peru, to observe the solar eclipse which is to come off on the 7th of September, and which will there nearly be total. No portion of the eclipse will be visible in any part of the United States to the northward of Florida. Says the *National Intelligencer*:

"The station which Lieut. G. will probably select is an eminence of the Andes, about one hundred miles to the south-east of Payta, and from whence the earliest phase of the eclipse will be visible.

"Mr. C. Raymond, a son of S. W. Raymond, Esq., of New-York, will accompany him as assistant, and goes provided by the Smithsonian Institution with every essential for the preservation of specimens of natural history intended to form a part of its already magnificent cabinet. The field offered to Mr. Raymond has never been explored by naturalists.

"M. Liail, of Paris, in the only astronomer of whose departure from Europe information has been received at the Smithsonian Institution. Lieut. Gilliss will meet him at Payta, and confer with him upon the most advantageous plan for securing all the facts sought."

PHOTOGRAPH OF SATURN.—At the Roman Observatory, M. Secchi has obtained a good photograph of Saturn, which shows not only the dark spaces between the planet and ring, but the shadow of the planet upon the ring. It also establishes two points of considerable interest: First, that the planet is darker than the ring; and second, that the light of the planet is more powerful than that of our moon. The proof of this is that it requires 20 seconds to produce a photographic image of the moon, while that of Saturn is produced in eight minutes, or four-hundred and eighty seconds. But Saturn is at least 80 times further from us than the moon, and instead of requiring 80 times the number of seconds to produce his image, he requires only 24 times. Mr. Secchi infers from the planet's superior photographic power that he is surrounded by a reflecting atmosphere, while the moon is destitute of such, and entirely black.—*Scotsman*.

A RAINBOW.

MEANTIME, refracted from yon eastern cloud,
Bestriding earth, the grand ethereal bow
Shoots up immense; and every hue unfolds,
In fair proportion, running from the red
To where the violet fades into the sky.

—THOMSON.

AN INVOCATION TO BIRDS.

Come, all ye feathery people of mid-air,
Who sleep 'midst rocks, or on the mountain summits
Lie down with the wild winds; and ye who build
Your homes amidst green leaves by grottoes cool;
And ye, who on the flat sands hoard your eggs
For suns to ripen, come! O phoenix rare!
If death hath spared, or philosophic search
Permit thee still to own thy haunted nest,
Perfect Arabian—lonely nightingale!
Dusk creature, who art silent all day long,
But when pale eve unsheals thy clear throat, loosest
Thy twilight music on the dreaming boughs,
Until they waken; and thou, cuckoo-bird,
Who art the ghost of sound, having no shape
Material, but dost wander far and near,
Like untouched echo whom the woods deny

Sight of her love, come all to my slow charm!
Come thou, sky-climbing bird, wakener of morn,
Who springest like a thought unto the sun,
And from his golden flood dost gather wealth
(*Epithalamium and Pindarique song.*)
And with it enrich our ears: come all to me,
Beneath the chamber where my lady lies,
And, in your several musics, whisper—Love!

—PROCTOR.

THE medical attendant of the Princess of Gothland asserts that crinoline is the reason that accouchments have lately become so dangerous and difficult. He adds that this fashion is the source of a vast number of chills, the consequence of which are always almost mortal. If this gentleman is to be credited, crinoline has as many deaths to answer for in Sweden as the cholera.

A CRIMINAL court of Mecklenburgh Schwerin has just concluded the trial of fifteen men of superior intellectual and social position for a conspiracy that expired in 1851, and was only discovered two years after its demise. The culprits were a committee in correspondence with some secret society of Berlin, which proposed to upset the princes and monarchs of Germany, and to establish a united republic on their ruins. The sentences of eleven of the accused varied from four months to three years; three were acquitted; and one having died, escaped the judgment of this slow tribunal.

THE human heart has, of course, its pouting fits; it determines to live alone; to flee into desert places; to have no employment—that is, to love nothing; but to keep on sullenly beating, beating, until death lays his little finger on the sulky thing, and all is still. It goes away from the world, and straightway, shut from human company, it falls in love with a plant, a stone—yea, it dandles cat or dog, and calls the creature darling. Yes, it is the beautiful necessity of our nature to love something.—*Jerrold*.

ON the 16th there was a heavy thunder-storm at Duckenfield England. The rain fell in torrents, and the ground was covered with thousands of toads which were supposed to have fallen with the rain.

A MUSICAL festival on a monster scale, such being a biennial custom in Switzerland, is about to come off at Zurich. Ten thousand musicians, vocal and instrumental, are this time to swell the choral anthem and deepen the rich diapason. There are various patriot hymns on the programme. A banquet where 12,000 Switzers and their guests to fraternize under the canopy of the Helvetic sky, is part of the announced performance.

MR. KAVANAGH, who took the letter from Lucknow, during the siege, to Sir Colin Campbell, has been rewarded with a sum of £2000, and an appointment in Oude, worth £700 a year.

THE Ladies' Gallery in the House of Commons has been enlarged, either to meet the prevailing fashion in the matter of skirts, or to accommodate a larger number of female politicians.

MR. JAMES BROWN, a London chemist, has patented an invention for the manufacture of paper which will not require damping previous to being printed upon.



DRAWN & ENG^d BY JOHN SARTAIN—PHILA^a

WASHINGTON IRVING.

Washington Irving

